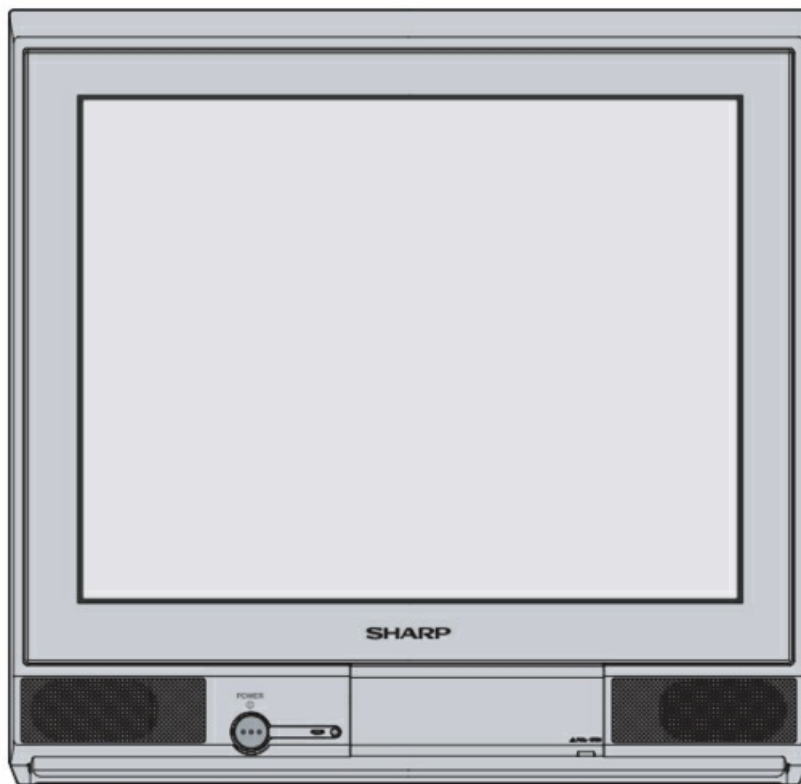


SHARP 21F-PA18 SERVICE MANUAL



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- Pif adjustment
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- Horizontal, vertical, deflection loop and focus adjustment
- Pal chroma adjustment
- Ntsc chroma adjustment
- Protector operation checking
- A/v input, output checking
- Function operation checking (video and audio)
- No raster
- No picture, no sound
- No sound
- Neither vertical nor horizontal synchronization

No vertical scan

Defective vertical amp. and vertical linearity

No specific colour

No colour

side view

BLOCK DIAGRAM: MAIN UNIT

Block diagram: crt unit

Description of schematic diagram

Voltage measurement conditions

Waveform measurement conditions

SCHEMATIC DIAGRAM: CRT UNIT

Schematic diagram: main unit

Printed wiring board assemblies

Pwb-a: main component side

Pwb-a: main chip side

Pwb-b: crt component side

Pwb-b: crt chip side

Parts guide

Cabinet parts

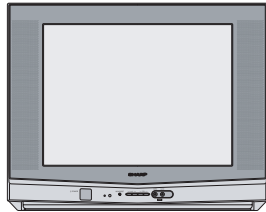
Packing parts

Other ManualsLib Projects

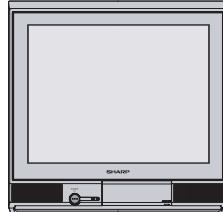
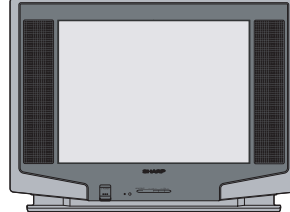
SHARP SERVICE MANUAL

COLOUR TELEVISION

Chassis No. GA-7



21F-PT220

21F-PA18
21F-PA18(B)

21F-PD250

**21F-PA18
21F-PA18(B)
21F-PD250
MODEL 21F-PT220**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

FEATURES

- PAL-B/G, D/K
- Frequency Synthesizer Tuner
- Full Auto System
- 100-CH Program Memory
- CATV (Hyper Band Ready)
- Hotel Mode
- White Temperature Select
- Off Timer
- Blue Back Function
- Aperture Control Circuit
- Auto Fine Tuning
- NTSC Colour Comb Filter
- High Contrast Picture (Black Stretch Circuit)
- Child Lock
- Multi Languages OSD (English/Thai)
- Rear AV IN / OUT Terminals
- Front AV-IN Terminal (Model 21F-PT220)

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Parts Guide

WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis. To prevent electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

CHAPTER 1. SPECIFICATIONS

[1] SPECIFICATIONS

Convergence	Self Convergence System
Focus	UNI-BI Focusing
Sweep Deflection	Magnetic
Intermediate Frequencies	
Picture IF Carrier	38.9MHz
Sound IF Carrier Frequency	
6.5MHz	32.4MHz
6.0MHz	32.9MHz
5.5MHz	33.4MHz
Colour Sub-Carrier Frequency	34.47MHz
Power Input	110 ~ 240V AC 50/60 Hz
Power Consumption	83W
Audio Power Output Rating	21F-PA18 & 21F-PA18(B) : 3W (rms) 21F-PD250 & 21F-PT220 : 5W (rms)
Speaker	
Size	21F-PA18 & 21F-PA18(B) : 5 x 9 cm (1 pc) 21F-PD250 & 21F-PT220 : 5 x 9 cm (2 pcs)
Voice Coil Impedance	16 ohms at 400 Hz
Aerial Input Impedance	
VHF/UHF	75 ohms Unbalanced
Receiving System	PAL-B/G, PAL - D/K, NTSC 3.58 MHz-B/G
Receiving Channel	
VHF-Channels	E2(48.25MHz) thru E12(224.25MHz) S1(105.25MHz) thru S41(463.25MHz)
UHF-Channels	E21(471.25MHz) thru E69(855.25MHz)
Dimensions	21F-PA18 & 21F-PA18(B) : Width: 502 mm Height: 485 mm Depth: 485 mm Weight(approx): 22.5 kg 21F-PD250 : Width: 625 mm Height: 470 mm Depth: 495.5 mm Weight(approx): 22 kg 21F-PT220 : Width: 577 mm Height: 465.5 mm Depth: 480 mm Weight(approx): 21.5 kg
Cabinet material	All Plastics

Specifications are subject to change without prior notice

CHAPTER 2. IMPORTANT SERVICE NOTES

[1] IMPORTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service personnel only.

1. SERVICE OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead. (AC line cord should be disconnected from AC outlet.)

- 1) Picture tube in this receiver employs integral implosion protection.
- 2) Replace with the same type number of picture tube for continued safety.
- 3) Do not lift picture tube by the neck.
- 4) Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.

2. X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute minimum. Since certain malfunctions or servicing may produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

- 1) When repairing the circuit, please make sure do not increase the high voltage of the set to more than 30.0kV (at beam 0 μ A).
- 2) To keep the set in a normal operation, please make sure it's function at 26.5kV $\pm$ 1.0kV (at beam 1,100 μ A). The set has been factory - adjusted to the above-mentioned high voltage.

*If there is a possibility that the high voltage fluctuates as a result of the repairs, never forget to check for such high voltage after the work.

- 3) Do not substitute a picture tube with unauthorized types and/or brands which may cause excessive X-ray radiation.

3. BEFORE RETURNING THE RECEIVER

Before returning the receiver to the user, perform the following safety checks.

- 1) Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
- 2) Inspect all protective devices such as non-metal control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators etc.

CHAPTER 3. ADJUSTMENT PRECAUTIONS

[1] ADJUSTMENT PRECAUTIONS

ADJUSTMENT PRECAUTIONS

This model's setting are adjusted in two different ways: through the I2C bus control and in the conventional analog manner. The adjustments via the I2C bus control include preset-only items and variable data.

CAUTION : MAKE SURE TV SET IN "NORMAL CONDITION" BEFORE SWITCH TO SERVICE MODE FOR ADJUSTMENT.

1. Setting the service mode by the microprocessor.

- (1) Press SERVICE key on the remote controller to set the TV set to SERVICE mode position, and the microprocessor is in input mode. (Adjustment through the I2C bus control). Service Mode also can be reached by connecting MCU Pin 5 to ground. (JA483 connect to JA484)
- (2) Press the MENU key on the remote controller to get ready to select the mode (Adjustment mode, Setting mode, Check mode and Option mode) one by one.
- (3) Press the CH DOWN / UP key on the remote controller to select the item in Adjustment mode, Setting mode or Option mode.
- (4) Using the VOLUME UP/ DOWN key on the remote controller, the data can be modified. Please wait approximately 200 msec for data storage in EEPROM before select to another mode.
- (5) In Check mode the data cannot be changed.
- (6) Press the SERVICE key again, it will switch to the NORMAL mode position, and the microprocessor is out of the SERVICE mode.

2. Factory Presetting.

- (1) During POWER OFF (AC OFF), switch on service key (by connecting MCU Pin 5 to ground) then follow by AC ON. Initial values are automatically preset only when a new EEPROM is used. (Judge with the first 4 bytes).
- (2) The initial data are preset as listed in page 3-6 to 3-11.
- (3) Make sure the data need modification or not (Initial data).

Precaution: If haven't done this initialization, it may possibly generate excessive Beam current.

3. For reference please check with memory map RH-IXC129WJZZQ. (See Page 4-1 ~ 4-32).

1. ADJUSTMENT ITEM

***Below are the adjustment items that should be done, PLS FOLLOW THE PROCEDURE. Otherwise some adjustment items will not be accurate.

NO ***	ADJUSTMENT ITEM	EFFECTIVE MODEL	REVISION
1	BUS SET UP	ALL MODELS	
2	OPTION SET UP		
3	H-VCO		
4	VIF-VCO		
5	S-TRAP fo		
6	RF-AGC		
7	PURITY ADJ		
8	CONVERGENCE ADJ		
9	FOCUS ADJ		
10	V-SHIFT (50 Hz)		
11	H-SHIFT (50 Hz)		
12	V-SIZE (50 Hz)		
13	SCREEN		
14	WHITE BALANCE		
15	SUB-BRIGHTNESS		
16	SUB-CONTRAST		
17	SUB-COLOR		
18	SUB-TINT		
19	BEAM CURRENT CHECK		
20	BEAM PROTECTOR CHECK		
21	HV PROTECTOR CHECK		
22	OTHER PROTECTOR CHECK		
23	AV OUT CHECK		
24	AV IN CHECK		
25	CONTRAST CONTROL CHECK		
26	COLOR CONTROL CHECK		
27	BRIGHTNESS CONTROL CHECK		
28	TINT CONTROL CHECK		
29	SHARPNESS CONTROL CHECK		
30	CH DISPLAY COLOR CHECK		
31	NORMAL DISPLAY CHECK		
32	WHITE TEMP CONTROL CHECK		
33	COLOR SYSTEM CHECK		
34	SOUND SYSTEM CHECK		
35	NOISE MUTE CHECK		
36	OSD LANGUAGE QUANTITY CHECK		
37	SHOCK TEST CHECK		

2. USER DATA IN SERVICE MODE

- 1) While SERVICE mode ON, EEPROM DATA will switch to the service data. Also, once SERVICE mode OFF, EEPROM will switch back to previous USER DATA.
- 2) In the service mode, the user data establish as below,

	USER DATA
CONTRAST	MAX (60)
COLOUR	CENT (0)
BRIGHTNESS	CENT (0)
TINT	CENT (0)
SHARPNESS	CENT (0)
WHITE TEMP	STANDARD
S-VOLUME	MIN
BLUE BACK	OFF
C SYSTEM	AUTO
S SYSTEM	*1

*1: For each CH, data is same as before switch to Service mode.

The flow of Mode list as following,

* Direct Key-in Mode for Service Items in Service Mode

RC CODE (HEX)	R/C KEY NAME	SERVICE-ITEM
80	POS 1	R-C UP (IN SERVICE MODE V00)
40	POS 2	G-C UP (IN SERVICE MODE V00)
C0	POS 3	B-C UP (IN SERVICE MODE V00)
20	POS 4	R-C DOWN (IN SERVICE MODE V00)
A0	POS 5	G-C DOWN (IN SERVICE MODE V00)
60	POS 6	B-C DOWN (IN SERVICE MODE V00)
E0	POS 7	R-D UP (IN SERVICE MODE V00)
10	POS 8	B-D UP (IN SERVICE MODE V00)
50	POS 0	B-D DOWN (IN SERVICE MODE V00)
E4	FLASHBACK	R-D DOWN (IN SERVICE MODE V00)
E4	FLASHBACK	Y-MUTE (BESIDES OF SERVICE MODE V00)
75	WHITE TEMP UP	RF-AGC (V01)
F5	WHITE TEMP DOWN	VIF-VC0 (V02)
C2	TUNE DOWN	H-VCO (V03)
8D	SHARPNESS DOWN	SUB-CON (V04)
D6	BALANCE LEFT	SUB-COL (V05)
0D	SHARPNESS UP	SUB-BRIGHT (V06)
36	BALANCE RIGHT	SUB-TINT (V07)
46	TREBLE UP	SUB-SHP (V08)
C6	TREBLE DOWN	SUB-COL-YUV (V09)
26	BASS UP	SUB-TINT-YUV (V10)
24	COLOUR UP	V-SIZE (V11), V-SIZE60 (V17)
54	BRIGHTNESS DOWN	V-SHIFT (V12), V-SHIFT60 (V18)
74	TINT DOWN	H-SHIFT (V13), H-SHIFT60 (V19)
66	SURROUND UP	SCM-BR (V14)
E6	SURROUND DOWN	SCM-BB (V15)
C4	CONTRAST DOWN	SUB-VOL (V16)
4C	PICTURE	S-TRAP-BG (V20)
CC	HOLD	S-TRAP-I (V21)
2C	TEXT	S-TRAP-DK (V22)
AC	CANCEL	S-TRAP-M (V23)
EC	SIZE	S-TRAP-574 (V24)
80	POS 1	R-C UP YUV (IN SERVICE MODE V25)
40	POS 2	G-C UP YUV (IN SERVICE MODE V25)
C0	POS 3	B-C UP YUV (IN SERVICE MODE V25)
20	POS 4	R-C DOWN YUV (IN SERVICE MODE V25)
A0	POS 5	G-C DOWN YUV (IN SERVICE MODE V25)
60	POS 6	B-C DOWN YUV (IN SERVICE MODE V25)
E0	POS 7	R-D UP YUV (IN SERVICE MODE V25)
10	POS 8	B-D UP YUV (IN SERVICE MODE V25)
50	POS 0	B-D DOWN YUV (IN SERVICE MODE V25)
E4	FLASHBACK	R-D DOWN YUV (IN SERVICE MODE V25)
C1		AUTO ADJ FOR V01, V02, V03, V20, V21, V22, V23, V24
CA		T-SET
81		SERVICE MODE

1) Please set the MCL to MCL4 as below :

2) After set the MCL, please set the INITIAL SETTING to INITIAL 9.

INITIAL 9 : For Thai (All Channel Sound System are set to B/G)

MCL4 (HEX AB)		
CH-NO	Fv (MHz)	SOUND SYS
0		
1	55.25	B/G
2	175.25	B/G
3	189.25	B/G
4	203.25	B/G
5	217.25	B/G
6	535.25	B/G
7		
8		
9		
10		
11	48.25	B/G
12	62.25	B/G
13	196.25	B/G
14	210.25	B/G
15	224.25	B/G
16	471.25	B/G
17	855.25	B/G
18		
19		
20		
21	223.95	B/G
22	224.55	B/G
23	223.85	B/G
24	224.65	B/G
25	223.75	B/G
26	224.75	B/G
27		
28		
29		
30		
31	91.25	M
32	103.25	M
33	171.25	M
34	183.25	M
35	193.25	M
36	205.25	M
37	217.25	M
38	621.25	M
39		
40		

MCL4(HEX AB)		
CH-NO	Fv (MHz)	SOUND SYS
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		

***NOTE: PLL DATA OF ABOVE FREQ SHOULD TAKE THE ACCOUNT OF PIF SETTING IN SERVICE OPTION 004 (VIF) BEFORE STORING INTO EEPROM**

SHIPPING SETTING & CHECKING
--

(1) The following default data has been factory-set for the E2PROM follow by INITIAL DATA selected.

ITEMS	DATA SETTING	MODEL
LAST POWER	ON	ALL MODELS
LAST TV/AV MODE	TV MODE	
LAST POSITION	CH 1	
FLASHBACK CHANNEL	CH 1	
1/2 DIGITENTR	2 DIGIT ENTRY	
VOLUME	0 (Min)	
BLUE BACK	OFF	
CHILD LOCK	OFF	
OFF TIMER	--:--	
PASSWORD	0000	
AFT	ALL CH ON	
COLOR SYSTEM	ALL CH AUTO	
SOUND SYSTEM	B/G	
SKIP	ALL CH OFF	
CONTRAST	60	
COLOR	+6	
BRIGHTNESS	0	
TINT	0(CENTER)	
SHARPNESS	+6	
WHITE TEMP	0	

INITIAL	LANGUAGE	SOUND SYSTEM
9 (HEX EE)	THAI	B/G

FACTORY SETTING BY MODEL

(Reference: Geomagnetism Adjustment)

MODEL	MAGNETIC FIELD(V, H) nT		BACKGROUND	LANG.	S-SYS	LANG QTY
THAI	20,000	40,000	12300°K	THAI	B/G	2

*NOTE FOR OSD TYPE:

2: ENGLISH / THAI

**This magnetic filed is in ITC CRT specification.

**AFTER INITIALIZED THE EEPROM (REFER TO FACTORY PRESETTING), READ DATA FROM EEPROM ADDRESS 00H ~ 03H, AND COMPARE TO THE LIST BELOW, IF DIFFERENT, INITIALIZE THE EEPROM.

ADDRESS	DATA	ADDRESS	DATA
00H:	7CH	02H:	78H
01H:	70H	03H:	70H

*** There are four stages of service mode data. First stage data from V00~V32 (Adjustment Mode).

To go into second stage of service mode data, press MENU key. Second stage data from F01~F185 (Setting Mode).

To go into third stage of service mode data, press MENU key. Third stage data is Check Mode.

To go into fourth stage of service mode data, press MENU key. Fourth stage data from O01~O37 (Option Mode).

To go into fifth stage of service mode data, press MENU key. Fifth stage data is NVM Edit Mode.

ADJUSTMENT MODE (FIRST STAGE)					
EEPROM ITEMS	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
R-DRIVE	V00	0~127	63	ADJ	PLS REFER TO ADJ ITEM FOR SCREEN AND WHITE BALANCE
B-DRIVE	V00	0~127	63	ADJ	
R-CUT	V00	0~255	127	ADJ	
G-CUT	V00	0~255	127	ADJ	
B-CUT	V00	0~255	127	ADJ	
RF-AGC	V01	0~127	50	AUTO	
VIF-VCO	V02	0~63	31	AUTO	
H-VCO	V03	0~7	3	AUTO	
SUB-CON	V04	0~127	100	ADJ	
SUB-COLOR	V05	0~127	63	ADJ	
SUB-BRIGHT	V06	0~255	127	ADJ	
SUB-TINT	V07	0~127	63	ADJ	
SUB-SHP PRE	V08	0~63	43	*FIX	BUS SETUP
SUB-COLOR-YUV	V09	0~127	90	*FIX	BUS SETUP
SUB-TINT-YUV	V10	0~127	63	FIX	
V-SIZE	V11	0~63	38	ADJ	
V-SHIFT	V12	0~7	3	ADJ	
H-SHIFT	V13	0~31	9	ADJ	
SCM-BR	V14	0~63	37	FIX	
SCM-BB	V15	0~63	22	FIX	
SUB-VOL	V16	0~60	60	FIX	
V-SIZE60	V17	-31~0~+31	0	*FIX	BUS SETUP
V-SHIFT60	V18	-7~0~+7	-1	*FIX	BUS SETUP
H-SHIFT60	V19	-15~0~+15	+2	FIX	IF NECESSARY, ADJ
S-TRAP(BG)	V20	0~127	64	AUTO	
S-TRAP(I)	V21	0~127	64	AUTO	
S-TRAP(DK)	V22	0~127	64	AUTO	
S-TRAP(M)	V23	0~127	64	AUTO	
S-TRAP(574)	V24	0~127	64	AUTO	
CUTOFF/BKGD YUV	V25				
R-DRI YUV	V25	0...127	63	FIX	
B-DRI YUV	V25	0...127	63	FIX	
R-CUT YUV	V25	0...255	127	FIX	NO FUNCTION
G-CUT YUV	V25	0...255	127	FIX	NO FUNCTION
B-CUT YUV	V25	0...255	127	FIX	NO FUNCTION
SUB-CON YUV	V26	0~127	100	FIX	
SUB-BRIGHT YUV	V27	0~255	127	FIX	
VS-CORRECT	V28	0~63	32	*FIX	BUS SETUP
VS-CORRECT OFFSET	V29	-13~+13	0	*FIX	BUS SETUP
V LINEARITY	V30	0~63	32	*FIX	BUS SETUP
V LINEARITY OFFSET	V31	-13~+13	0	*FIX	BUS SETUP
SUB-SHP OV	V32	0~63	43	*FIX	BUS SETUP

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
C.CLIP-LVL	CLIP LEVEL CONTRAST CONTROL OF RGB INPUT	F01	0 (20H)/ 1(40H)	0	*FIX	BUS SETUP
RGB-CLIP	CLIPPING OF RGB CONTRAST CONTROL	F02	0 (enable)/ 1(disable)	0	FIX	
BS	BLACK STRETCH	F03	0 (enable)/ 1(disable)	0	FIX	
ABCL	ABCL PROCESSING (ACL PROCESSING)	F04	0 (ACL)/ 1(ABCL)	0	FIX	
ABCL-GAIN	ABCL PROCESSING GAIN	F05	0 (Lo)/ 1(Hi)	0	FIX	
S-OUT-LVL-NOT USED	AUDIO OUTPUT GAIN CONTROL	F06	0...127	95	FIX	NO FUNCTION
VIF-G	P-IF DETECTION GAIN OUTPUT	F07	0...7	4	*FIX	BUS SETUP
SHPG	SHARPNESS GAIN	F08	0 (soft)/ 1(sharp)	0	FIX	
SHPG-P	SHARPNESS GAIN PAL	F09	0 (soft)/ 1(sharp)	0	FIX	
SHPG-S	SHARPNESS GAIN SECAM	F10	0 (soft)/ 1(sharp)	0	FIX	
SHPG-N4	SHARPNESS GAIN N443	F11	0 (soft)/ 1(sharp)	0	FIX	
SHPG-N3	SHARPNESS GAIN N358	F12	0 (soft)/ 1(sharp)	1	FIX	
YDL	Y SIGNAL DELAY	F13	0...7	5	FIX	
YDL-P	Y SIGNAL DELAY PAL	F14	0...7	5	FIX	
YDL-S	Y SIGNAL DELAY SECAM	F15	0...7	7	FIX	
YDL-N4	Y SIGNAL DELAY N443	F16	0...7	5	FIX	
YDL-N3	Y SIGNAL DELAY N358	F17	0...7	5	FIX	
YDL-AV	Y SIGNAL DELAY AV	F18	0...7	6	FIX	
YDL-AV-P	Y SIGNAL DELAY PAL (AV)	F19	0...7	6	FIX	
YDL-AV-S	Y SIGNAL DELAY SECAM (AV)	F20	0...7	7	FIX	
YDL-AV-N4	Y SIGNAL DELAY N443 (AV)	F21	0...7	6	FIX	
YDL-AV-N3	Y SIGNAL DELAY N358 (AV)	F22	0...7	6	*FIX	BUS SETUP
YDL-YUV	Y SIGNAL DELAY YUV	F23	0...7	6	*FIX	BUS SETUP
COL-AV (OFFSET)	COLOUR OFFSET AV	F24	-31...0...+31	+10	*FIX	BUS SETUP
COL-P (OFFSET)	COLOUR OFFSET PAL	F25	-31...0...+31	0	*FIX	BUS SETUP
COL-S (OFFSET)	COLOUR OFFSET SECAM	F26	-31...0...+31	+9	FIX	
COL-N4 (OFFSET)	COLOUR OFFSET N443	F27	-31...0...+31	-8	FIX	
COL-N3 (OFFSET)	COLOUR OFFSET N358	F28	-31...0...+31	-7	*FIX	BUS SETUP
COL-ADJ (OFFSET)	COLOUR OFFSET ADJUST	F29	-31...0...+31	0	*FIX	BUS SETUP
SHP-PRE-AV (OFFSET)	SHARPNESS PRE OFFSET -AV	F30	-31...0...+31	+5	*FIX	BUS SETUP
SHP-PRE-YUV (OFFSET)	SHARPNESS PRE OFFSET -YUV	F31	-31...0...+31	-5	*FIX	BUS SETUP
SHP-PRE-P (OFFSET)	SHARPNESS PRE OFFSET -PAL	F32	-31...0...+31	-10	*FIX	BUS SETUP
SHP-PRE-S (OFFSET)	SHARPNESS PRE OFFSET - SECAM	F33	-31...0...+31	-15	*FIX	BUS SETUP
SHP-PRE-N4 (OFFSET)	SHARPNESS PRE OFFSET -N443	F34	-31...0...+31	-10	*FIX	BUS SETUP
SHP-PRE-N3 (OFFSET)	SHARPNESS PRE OFFSET -N358	F35	-31...0...+31	-10	*FIX	BUS SETUP
SHP-OV-AV (OFFSET)	SHARPNESS OV OFFSET -AV	F36	-31...0...+31	+5	*FIX	BUS SETUP
SHP-OV-YUV (OFFSET)	SHARPNESS OV OFFSET - YUV	F37	-31...0...+31	+5	FIX	
SHP-OV-P (OFFSET)	SHARPNESS OV OFFSET -PAL	F38	-31...0...+31	0	*FIX	BUS SETUP
SHP-OV-S (OFFSET)	SHARPNESS OV OFFSET - SECAM	F39	-31...0...+31	-5	*FIX	BUS SETUP
SHP-OV-N4 (OFFSET)	SHARPNESS OV OFFSET-N443	F40	-31...0...+31	0	*FIX	BUS SETUP
SHP-OV-N3 (OFFSET)	SHARPNESS OV OFFSET -N358	F41	-31...0...+31	0	*FIX	BUS SETUP
TINT-AV (OFFSET)	TINT OFFSET AV	F42	-63...0...+63	0	*FIX	BUS SETUP
TINT-ADJ (OFFSET)	TINT OFFSET ADJUST	F43	-63...0...+63	0	*FIX	BUS SETUP
TINT-YUV-ADJ (OFFSET)	TINT YUV OFFSET ADJUST	F44	-63...0...+63	0	FIX	
R-R (OFFSET)	R-DRIVE OFFSET WHEN WHITE TEMP IS RED	F45	-63...0...+63	+8	*FIX	BUS SETUP
B-R (OFFSET)	B-DRIVE OFFSET WHEN WHITE TEMP IS RED	F46	-63...0...+63	-10	*FIX	BUS SETUP
R-B (OFFSET)	R-DRIVE OFFSET WHEN WHITE TEMP IS BLUE	F47	-63...0...+63	-3	*FIX	BUS SETUP
B-B (OFFSET)	B-DRIVE OFFSET WHEN WHITE TEMP IS BLUE	F48	-63...0...+63	+13	*FIX	BUS SETUP
CTRAP-ADJ	CENTER VALUE OF CHROMA TRAP	F49	0...3	2	FIX	
CTRAP-ADJ-P	CENTER VALUE OF CHROMA TRAP PAL	F50	0...3	2	FIX	
CTRAP-ADJ-S	CENTER VALUE OF CHROMA TRAP SECAM	F51	0...3	2	FIX	
CTRAP-ADJ-N4	CENTER VALUE OF CHROMA TRAP N443	F52	0...3	2	FIX	
CTRAP-ADJ-N3	CENTER VALUE OF CHROMA TRAP N358	F53	0...3	2	FIX	

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
1W-TV	VERT SYNC DETECTION MODE FOR AV (1 WINDOW/2 WINDOW)	F54	0 (2W)/ 1(1W)	0	FIX	
1W-AV	VERT SYNC DETECTION MODE FOR TV (1 WINDOW/2 WINDOW)	F55	0 (2W)/ 1(1W)	1	FIX	
V-FREE (NO SYNC)	SET VERTICAL TO FORCED FREE RUN MODE	F56	0(NORMAL) / 1(FREERUN)	0	*FIX	BUS SETUP
AFC2 (NO SYNC)	HORIZONTAL AFC2 GAIN	F57	0(NORMAL) / 1(DOWN)	0	FIX	
GAMMA	GAMMA CORRECTION QTY	F58	0...3	0	*FIX	BUS SETUP
BS-D/C	BLACK STRETCH CONTROL LEVEL	F59	0...15	10	FIX	
BS-GAIN	BLACK STRETCH LEVEL	F60	0/1	0	FIX	
OM-DET	OVER MODULATION DETECT	F61	0 (disable)/ 1(enable)	0	FIX	
SL-TV	SLICE LEVEL OF SYNC DETECTION TV	F62	0...7	2	FIX	
SL-AV	SLICE LEVEL OF SYNC DETECTION AV	F63	0...7	4	*FIX	BUS SETUP
SL-YUV	SLICE LEVEL OF SYNC DETECTION YUV	F64	0...7	4	FIX	
AS/FBP-TV	AS-TV/AV/YUV SWITCH & CH CHANGE, FBP-FLYBACK PULSE SLICE LEVEL (TV)	F65	0...3	2	*FIX	BUS SETUP
AS/FBP-AV	AS-TV/AV/YUV SWITCH & CH CHANGE, FBP-FLYBACK PULSE SLICE LEVEL (AV)	F66	0...3	2	*FIX	BUS SETUP
AS/FBP-YUV	AS-TV/AV/YUV SWITCH & CH CHANGE, FBP-FLYBACK PULSE SLICE LEVEL (YUV)	F67	0...3	2	*FIX	BUS SETUP
VDL	COLOUR DIFF. INPUT PHASE ADJ	F68	0...3	0	FIX	
UDL	COLOUR DIFF. INPUT PHASE ADJ	F69	0...3	0	FIX	
AUTO-SCM-KIL-TV	SECAM COLOUR KILLER SENSITIVITY (TV)	F70	0...3	1	FIX	
SECAM-BGP	INTERNAL SECAM BGP TIMING	F71	0...3	0	FIX	
N45	INHIBIT 50Hz NTSC 4.43	F72	0 (enable)/ 1(disable)	0	FIX	
OSD-POS-V50	OSD VERTICAL POSITION (50Hz)	F73	1...55	36	FIX	
OSD-POS-V60	OSD VERTICAL POSITION (60Hz)	F74	1...50	31	FIX	
OSD-POS-H	OSD HORIZONTAL POSITION	F75	0...127	9	FIX	
CP	CHARGE PUMP	F76	0/1	1	*FIX	BUS SETUP
AVL LEVEL	AUTO VOLUME LIMIT LEVEL	F77	0 : 600mVrms 1 : 450mVrms	0	FIX	
AUTO-SCM-KIL-AV-YUV	SECAM COLOUR KILLER SENSITIVITY (AV/YUV)	F78	0...3	1	FIX	
AFC1-GAIN-TV	MSB OF HORIZONTAL AFC GAIN1 (TV)	F79	0...3	0	FIX	
AFC1-GAIN-AV	MSB OF HORIZONTAL AFC GAIN1 (AV)	F80	0...3	3	FIX	
AFC1-GAIN-YUV	MSB OF HORIZONTAL AFC GAIN1 (YUV)	F81	0...3	3	FIX	
OSD LEVEL	OSD LEVEL	F82	0 : 10% 1 : 30% 2 : 50% 3 : 70% 4 : 90%	3	*FIX	BUS SETUP
TAKE-OFF-TV	TAKEOFF/BPF OF CHROMA BPF PROCESSING TV	F83	0(BPF) / 1(TAKEOFF)	1	FIX	
TAKE-OFF-AV	TAKEOFF/BPF OF CHROMA BPF PROCESSING AV	F84	0(BPF) / 1(TAKEOFF)	0	FIX	
TAKE-OFF-YUV	TAKEOFF/BPF OF CHROMA BPF PROCESSING YUV	F85	0(BPF) / 1(TAKEOFF)	0	FIX	
C-ANGLE (103 DEG/ 95 DEG)	CHROMA MODULATION ANGLE	F86	0(103DEG) / 1(95DEG)	1	*FIX	BUS SETUP
AC-FAIL-WO-BRIGHT	PICTURE BLACK LEVEL (BRIGHT) CONTROL - AC FAILURE	F87	0...255	255	FIX	
FORCED-SCM-KIL-TV	FORCED SECAM COLOUR KILLER SENSITIVITY (TV)	F88	0...3	2	FIX	
FORCED-SCM-KIL-AV-YUV	FORCED SECAM COLOUR KILLER SENSITIVITY (AV/YUV)	F89	0...3	2	FIX	
CTI ADJ.	COLOUR EDGE IMPROVEMENT	F90	0 (normal)/ 1(improve)	1	FIX	
V-DEMUTE-DELAY	VIDEO DEMUTE DELAY	F91	0-255	0	*FIX	BUS SETUP
S-DEMUTE-DELAY	SOUND DEMUTE DELAY	F92	0-255	0	*FIX	BUS SETUP

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
MER	S-BOOSTER FREQ. CHARACTERISTIC CONTROL	F93	0~255	70	FIX	
MEL1	S-BOOSTER LEVEL1	F94	0~255	150	FIX	
MEL2	S-BOOSTER LEVEL2	F95	0~255	156	FIX	
MEL3	S-BOOSTER LEVEL3	F96	0~255	163	FIX	
MEL4	S-BOOSTER LEVEL4	F97	0~255	165	FIX	
MEL5	S-BOOSTER LEVEL5	F98	0~255	170	FIX	
MEL6	S-BOOSTER LEVEL6	F99	0~255	180	FIX	
S-ST-POINT	S-BOOSTER START POINT	F100	0~60	21	FIX	
S-SP-POINT	S-BOOSTER STOP POINT	F101	0~60	60	FIX	
S-STEP	S-BOOSTER STEP	F102	0~60	7	FIX	
POW-STORAGE	CONTRAST/BRIGHTNESS INCREASE GRADUALLY	F103	0(DISABLE) / 1(ENABLE)	1	FIX	
S-B-BASS	S-BOOSTER BASS LIMITER (WHEN S-BOOSTER ON)	F104	0 ... +10	+10	FIX	
S-B-TREB	S-BOOSTER TREBLE LIMITER (WHEN S-BOOSTER ON)	F105	0 ... +10	+10	FIX	
S-BASS	S-BOOSTER BASS LIMITER (WHEN S-BOOSTER OFF)	F106	0 ... +10	+10	FIX	
S-TREB	S-BOOSTER TREBLE LIMITER (WHEN S-BOOSTER OFF)	F107	0 ... +10	+10	FIX	
V-STD-TV	VERTICAL STANDARD SIGNAL DETECTOR SWITCH (TV)	F108	0(DISABLE) / 1(ENABLE)	0	FIX	
V-STD-AV	VERTICAL STANDARD SIGNAL DETECTOR SWITCH (AV)	F109	0(DISABLE) / 1(ENABLE)	0	FIX	
V-STD-YUV	VERTICAL STANDARD SIGNAL DETECTOR SWITCH (YUV)	F110	0(DISABLE) / 1(ENABLE)	0	FIX	
HVCO-FREERUN-SHIFT	HVCO-FREERUN-SHIFT	F111	0/1	0	FIX	
HVCO-PULLDOWN	HVCO PULLDOWN	F112	0/1	0	FIX	
HVCO-PULLUP	HVCO PULLUP	F113	0/1	0	FIX	
HVCO-PULLIN-UP	HVCO PULLIN UP	F114	0/1	0	FIX	
PEAK-ACL	PEAK ACL	F115	0/1	0	FIX	
APER-FREQ	APER FREQ	F116	0/1	0	FIX	
R-DRI YUV OFFSET	RGB OUTPUT RED GAIN OFFSET (YUV)	F117	-63...0...+63	0	FIX	
B-DRI YUV OFFSET	RGB OUTPUT BLUE GAIN OFFSET (YUV)	F118	-63...0...+63	0	FIX	
R-CUT YUV OFFSET	RGB OUTPUT-RED BIAS LEVEL OFFSET (YUV)	F119	-63...0...+63	0	FIX	
G-CUT YUV OFFSET	RGB OUTPUT-GREEN BIAS LEVEL OFFSET (YUV)	F120	-63...0...+63	0	FIX	
B-CUT YUV OFFSET	RGB OUTPUT-BLUE BIAS LEVEL OFFSET (YUV)	F121	-63...0...+63	0	FIX	
CON YUV OFFSET	SUB-CONTRAS OFFSET (YUV)	F122	-63...0...+63	0	FIX	
BRT YUV OFFSET	SUB-BRIGHT OFFSET (YUV)	F123	-63...0...+63	0	FIX	
SHP ANT-ONII OFFSET	SHARP ANT-ON II OFFSET FOR VIDEO TONE	F124	-31...0...+31	0	FIX	
WAIT MD TIME	SETTING CYCLE PROCESS TIME AT LOW POWER	F125	0..2	2	FIX	
Contrast OFFSET	CONTRAST (PICTURE LEVEL) OFFSET	F126	-63...0...+63	0	FIX	
Bright OFFSET	PICTURE BLACK LEVEL (BRIGHT) OFFSET	F127	-63...0...+63	0	FIX	
CR-PEDESTEL-ADJ	Cr SIGNAL LEVEL ADJUSTMENT	F128	0...15	8	*FIX	BUS SETUP
CB-PEDESTEL-ADJ	Cb SIGNAL LEVEL ADJUSTMENT	F129	0...15	8	*FIX	BUS SETUP
SIF-PAL	SOUND S/N SWITCH FOR PAL	F130	0/1	0	FIX	
AV2 BRIGHTNESS OFFSET	AV2 BRIGHT OFFSET	F131	-15...0...+15	+7	FIX	
BASS OFFSET	BASS OFFSET	F132	-4...0...+4	0	*FIX	BUS SETUP
TREBLE OFFSET	TREBLE OFFSET	F133	-4...0...+4	0	*FIX	BUS SETUP
AS-SPEED-DN	AUTO SLICE SPEED SWITCH (DOWN)	F134	0(DISABLE) / 1(ENABLE)	0	FIX	
AS-SPEED-UP	AUTO SLICE SPEED SWITCH (UP)	F135	0(DISABLE) / 1(ENABLE)	0	FIX	
SIF-BPF-WIDE	SIF BPF BANDWIDTH SELECTOR	F136	0...3	0	FIX	
SIF-BPF-WIDE-574	SIF BPF BANDWIDTH SELECTOR	F137	0...3	0	*FIX	BUS SETUP
ACC-AMP-ON	INCREASE CHROMA ACC AMP GAIN	F138	0(NORMAL) / 1(GAIN UP)	0	FIX	
TEST PATTERN	TEST PATTERN	F139	0...15	0	FIX	
FSC-FREE	FSC-FREE	F140	0(NORMAL) / 1(FREE RUN)	1	FIX	
MCUVOUT	MCUVOUT	F141	0/1	0	FIX	
HALF-H KILLER	HALF-H KILLER	F142	0/1	1	FIX	
V-AGC	V-AGC	F143	0/1	0	FIX	
CONT NEWS	CONTRAST SETTING- NEWS	F144	0..60	30	*FIX	BUS SETUP
CONT MUSIC	CONTRAST SETTING- MUSIC	F145	0..60	50	*FIX	BUS SETUP
CONT MOVIE	CONTRAST SETTING- MOVIE	F146	0..60	60	FIX	
BRIGHT NEWS	BRIGHTNESS SETTING- NEWS	F147	-30..0...+30	0	FIX	
BRIGHT MUSIC	BRIGHTNESS SETTING- MUSIC	F148	-30..0...+30	0	FIX	

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
BRIGHT MOVIE	BRIGHTNESS SETTING- MOVIE	F149	-30..0...+30	0	FIX	
COL NEWS	COLOUR SETTING- NEWS	F150	-30..0...+30	0	*FIX	BUS SETUP
COL MUSIC	COLOUR SETTING- MUSIC	F151	-30..0...+30	0	FIX	
COL MOVIE	COLOUR SETTING- MOVIE	F152	-30..0...+30	+10	*FIX	BUS SETUP
SHARP NEWS	SHARPNESS SETTING- NEWS	F153	-30..0...+30	-10	*FIX	BUS SETUP
SHARP MUSIC	SHARPNESS SETTING- MUSIC	F154	-30..0...+30	0	FIX	
SHARP MOVIE	SHARPNESS SETTING- MOVIE	F155	-30..0...+30	+5	*FIX	BUS SETUP
SURR NEWS	SURROUND SETTING- NEWS	F156	0(OFF) / 1(ON) / 2(ONII)	0	FIX	
SURR MUSIC	SURROUND SETTING- MUSIC	F157	0(OFF) / 1(ON) / 2(ONII)	0	FIX	
SURR MOVIE	SURROUND SETTING- MOVIE	F158	0(OFF) / 1(ON) / 2(ONII)	0	FIX	
TREBLE NEWS	TREBLE SETTING- NEWS	F159	-10..0...+10	-10	*FIX	BUS SETUP
TREBLE MUSIC	TREBLE SETTING- MUSIC	F160	-10..0...+10	0	*FIX	BUS SETUP
TREBLE MOVIE	TREBLE SETTING- MOVIE	F161	-10..0...+10	+5	*FIX	BUS SETUP
BASS NEWS	BASS SETTING- NEWS	F162	-10..0...+10	-5	*FIX	BUS SETUP
BASS MUSIC	BASS SETTING- MUSIC	F163	-10..0...+10	0	*FIX	BUS SETUP
BASS MOVIE	BASS SETTING- MOVIE	F164	-10..0...+10	+10	*FIX	BUS SETUP
S-BOOST NEWS	S-BOOSTER SETTING- NEWS	F165	0(OFF) / 1(ON)	0	FIX	
S-BOOST MUSIC	S-BOOSTER SETTING- MUSIC	F166	0(OFF) / 1(ON)	1	FIX	
S-BOOST MOVIE	S-BOOSTER SETTING- MOVIE	F167	0(OFF) / 1(ON)	1	FIX	
R-R-C	R-GAIN OFFSET WHEN WHITE TEMP IS RED CENTER TONE	F168	-63...0...+63	+4	FIX	
B-R-C	B-GAIN OFFSET WHEN WHITE TEMP IS RED CENTER TONE	F169	-63...0...+63	-5	FIX	
R-B-C	R-GAIN OFFSET WHEN WHITE TEMP IS BLUE CENTER TONE	F170	-63...0...+63	-1	FIX	
B-B-C	B-GAIN OFFSET WHEN WHITE TEMP IS BLUE CENTER TONE	F171	-63...0...+63	+6	FIX	
TRE OFFSET SUR ONII	TREBLE OFFSET WHEN SURROUND ONII	F172	-7... 0 ...+7	+1	*FIX	BUS SETUP
VFREE2	V-FREE WHEN H LOCKED OUT	F173	0(OFF) / 1(ON)	0	FIX	
VD3 / VD2 / VD1-TV	VD2 & VD1-VERT SYNC DETECT MIN WIDTH MSB & LSB RESPECTIVELY (TV)	F174	0...7	1	FIX	
VD3 / VD2 / VD1-AV	VD2 & VD1-VERT SYNC DETECT MIN WIDTH MSB & LSB RESPECTIVELY (AV)	F175	0...7	3	FIX	
VD3 / VD2 / VD1-YUV	VD2 & VD1-VERT SYNC DETECT MIN WIDTH MSB & LSB RESPECTIVELY (YUV)	F176	0...7	3	FIX	
SL-TV (WEAK)	SL-TV (WEAK)	F177	0...7	7	FIX	
VIF-AGC THRESHOLD	VIF AGC THRESHOLD	F178	0...127	127	FIX	
AFT OFFSET	AFT OFFSET	F179	0 (OFF) 1 (-50kHz) 2 (-100kHz) 3 (-150kHz) 4 (-200kHz)	0	*FIX	BUS SETUP
VOL-START	VOLUME START POINT	F180	0...60	60	*FIX	BUS SETUP
VOL-STEP	VOLUME STEP	F181	0...60	0	*FIX	BUS SETUP
BASS-LIMIT1	BASS-LIMIT1	F182	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP
BASS-LIMIT2	BASS-LIMIT2	F183	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP
BASS-LIMIT3	BASS-LIMIT3	F184	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP
BASS-LIMIT4	BASS-LIMIT4	F185	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP

OPTION MODE (FOURTH STAGE)				
EEPROM ITEMS	OSD	DATA LENGTH	INITIAL DATA	REMARK
***HOTEL MODE	O01	0 (OFF) / 1 (ON)	0	OPTION SET UP
***HTL-POS	O02	0~99,--	--	OPTION SET UP
***HTL-VOL	O03	0~60,--	--	OPTION SET UP
VIF-NOT-USE	O04	0 (38.0) / 1 (38.9)	1	OPTION SET UP
SECAM	O05	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
N443(RF)	O06	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
N358(RF)	O07	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
Force-Col	O08	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
S-SYS	O09	1(BG ONLY)~15(ALL)	15	OPTION SET UP
AV	O10	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
AV2	O11	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
YUV	O12	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
S-CTRL	O13	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
NICAM-NOT-USE	O14	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
A2-NOT-USE	O15	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
TEXT-NOT-USE	O16	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
BIL	O17	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
LANG	O18	1~255	63	OPTION SET UP
SERCH-SP	O19	1(350)~2(450)~3(550)~4(650)~5(750)	3	OPTION SET UP
R/C-MENU	O20	0 (ENABLE) / 1 (DISABLE)	0	OPTION SET UP
LED-CONT	O21	0 (ONE LED) / 1 (TWO LED)	0	OPTION SET UP
S-BOOSTER	O22	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
SHARP-LOGO	O23	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
TUNER BAND	O24	0 / 1	0	OPTION SET UP
WHITE BACK	O25	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
☒ BOOSTER	O26	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
250 CHANNEL	O27	0 : 100 channels (8k EEPROM) 1 : 250 channels (16k EEPROM)	0	OPTION SET UP
AVL	O28	0 : fix to 0 1 : fix to 1 2 : AVL in SOUND MENU	2	OPTION SET UP
**LNA TUNER	O29	0(Alps) / 1(Matsushita)	0	OPTION SET UP IF (ONLY FUNCTION IF ANTENNA BOOSTER O26 =1)
CHILD LOCK	O30	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
NORMAL KEY	O31	Set items to default for 0 : Picture and Sound 1 : Picture only	0	OPTION SET UP
AV MODE	O32	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
S-CTRL LIMIT	O33	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
MP-IN	O34	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
VIRGIN-MODE	O35	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
WHITE-TEMP	O36	0 : 3 modes 1 : 5 modes	0	OPTION SET UP
LK MENU	O37	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP

*** HOTEL MODE OPERATION OF HOTEL MODE: WHEN CHANGE SERVICE DATA O01 TO 1, HOTEL MODE IS ON WHEN HOTEL MODE IS ON, 1. Max volume data is determined by option setting HTL-VOL (O03) 2. Channel position after POWER ON is determined by option setting HOTEL-POS (O02) (if option setting HOTEL-POS is not set, processing is according to last position data). 3. User data updates of EEPROM regarding the video and audio control is not allowed. 4. Preset mode is disable. 5. CH SETTING menu is not available.		
** TUNER BAND		
P-Freq	BAND	
	TUNER BAND = 0 (same as GA6)	TUNER BAND = 1
41.10MHz ~ 122.10MHz	VHF-L (0001)	VHF-L (0001)
122.15MHz ~ 143.10MHz		VHF-H (0010)
143.15MHz ~ 362.10MHz	VHF-H (0010)	
362.15MHz ~ 426.10MHz		UHF (1000)
426.15MHz ~ 871.10MHz	UHF (1000)	

ADJ ITEM: BUS SET UP (1 ST & 2ND STAGE SERVICE DATA)			
	SERVICE ITEMS	ALL MODELS	REMARK
V08	SUB-SHP PRE	38	ADJUST IF NECESSARY TO IMPROVE
V09	SUB-COLOR-YUV	90	
V10	SUB-TINT-YUV	63	
V17	V-SIZE60	+4	
V18	V-SHIFT60	-2	
V28	VS-CORRECT	44	
V29	VC-CORRECT OFFSET	-9	
V30	V LINEARITY	36	
V31	V LINEARITY OFFSET	+3	
V32	SUB-SHP 0V	38	
F01	C.CLIP-LVL	1	
F07	VIF-G	7	
F22	YDL-AV-N3	5	
F23	YDL-YUV	6	
F24	COL-AV	+4	
F25	COL-P	+12	
F28	COL-N3	+8	
F29	COL-ADJ	+14	
F30	SHP-PRE-AV	+1	
F32	SHP-PRE-P (OFFSET)	+7	
F33	SHP-PRE-S (OFFSET)	+2	
F34	SHP-PRE-N4 (OFFSET)	+7	
F35	SHP-PRE-N3 (OFFSET)	+7	
F36	SHP-OV-AV (OFFSET)	+1	
F38	SHP-OV-P (OFFSET)	+7	
F39	SHP-OV-S (OFFSET)	+2	
F40	SHP-OV-N4 (OFFSET)	+7	
F41	SHP-OV-N3 (OFFSET)	+7	
F42	TINT-AV	+7	
F43	TINT-ADJ	+2	
F45	R-R (OFFSET)	0	
F46	B-R (OFFSET)	-9	
F47	R-B (OFFSET)	-6	
F48	B-B (OFFSET)	+8	
F56	V-FREE (NO SYNC)	1	
F58	GAMMA	1	
F63	SL-AV	2	
F65	AS/FBP-TV	3	
F66	AS/FBP-AV	3	
F67	AS/FBP-YUV	3	
F76	CP	0	
F82	OSD LEVEL	4	
F86	C-ANGLE (103 DEG/ 95 DEG)	0	
F91	V-DEMUTE-DELAY	25	
F92	S-DEMUTE-DELAY	40	
F124	SHP-ANT-ONII OFFSET	0	
F128	CR-PEDESTEL-ADJ	8	
F129	CB-PEDESTEL-ADJ	8	
F132	BASS OFFSET	0	
F133	TREBLE OFFSET	0	
F136	SIF-BPF-WIDE	0	
F144	CONT NEWS	50	
F145	CONT MUSIC	60	
F150	COL NEWS	-5	
F152	COL MOVIE	+6	
F153	SHARP NEWS	-6	
F155	SHARP MOVIE	+6	
F159	TREBLE NEWS	-10	
F160	TREBLE MUSIC	0	
F161	TREBLE MOVIE	+5	
F162	BASS NEWS	-5	
F163	BASS MUSIC	0	
F164	BASS MOVIE	+10	
F172	TRE OFFSET SUR ONII	+1	
F179	AFT OFFSET	2	
F180	VOL-START	60	
F181	VOL-STEP	0	
F182	BASS-LIMIT1	7	
F183	BASS-LIMIT2	7	
F184	BASS-LIMIT3	7	
F185	BASS-LIMIT4	7	

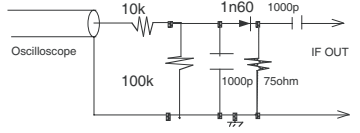
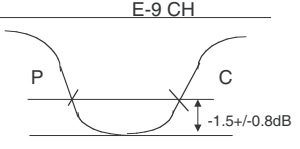
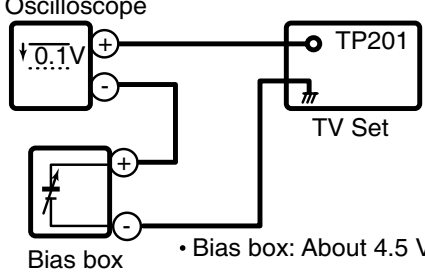
ADJ ITEM: OPTION SET UP (4TH STAGE SERVICE DATA)

SERVICE ITEMS			21F-PT220	21F-PA18 21F-PA18(B) 21F-PD250
O01	HTL MODE	0 (OFF) / 1 (ON)	0	0
O02	HTL-POS	0~99,--	--	--
O03	HTL-VOL	0~60,--	--	--
O04	HSYNC-JUDGE	0 (DISABLE) / 1 (ENABLE)	0	0
O05	SECAM	0 (DISABLE) / 1 (ENABLE)	0	0
O06	N443(RF)	0 (DISABLE) / 1 (ENABLE)	0	0
O07	N358(RF)	0 (DISABLE) / 1 (ENABLE)	1	1
O08	FORCE-COL	0 (DISABLE) / 1 (ENABLE)	0	0
O09	S-SYS	1(BG ONLY)~15(ALL)	5	5
O10	AV	0 (DISABLE) / 1 (ENABLE)	1	1
O11	AV2	0 (DISABLE) / 1 (ENABLE)	1	0
O12	YUV	0 (DISABLE) / 1 (ENABLE)	0	0
O13	S-CTRL	0 (DISABLE) / 1 (ENABLE)	0	0
O14	NICAM-NOT-USE	0 (DISABLE) / 1 (ENABLE)	0	0
O15	A2-NOT-USE	0 (DISABLE) / 1 (ENABLE)	0	0
O16	TEXT-NOT-USE	0 (DISABLE) / 1 (ENABLE)	0	0
O17	BIL	0 (DISABLE) / 1 (ENABLE)	1	1
O18	LANG	1~255	5	5
O19	SEARCH-SP	1(350)~2(450)~3(550)~4(650)~5(750)	1	1
O20	R/C MENU	0 (ENABLE) / 1 (DISABLE)	0	0
O21	LED-CONT	0 (ONE LED) / 1 (TWO LED)	0	0
O22	S-BOOSTER	0 (DISABLE) / 1 (ENABLE)	0	0
O23	SHARP-LOGO	0 (DISABLE) / 1 (ENABLE)	0	0
O24	TUNER BAND	0 / 1	0	0
O25	WHITE BACK	0 (DISABLE) / 1 (ENABLE)	0	0
O26	☒ BOOSTER	0 (DISABLE) / 1 (ENABLE)	0	0
O27	250 CHANNEL	0(100 channels) / 1(250 channels)	0	0
O28	AVL	0 (fix to 0)~ 1(fix to 1)~ 2 (AVL in SOUND MENU)	0	0
O29	LNA TUNER	0 (Alps) / 1 (Matsushita)	0	0
O30	CHILD LOCK	0 (DISABLE) / 1 (ENABLE)	1	1
O31	NORMAL KEY	0 (PICTURE & SOUND) / 1 (PICTURE ONLY)	0	0
O32	AV MODE	0 (DISABLE) / 1 (ENABLE)	0	0
O33	S-CTRL LIMIT	0 (DISABLE) / 1 (ENABLE)	0	0
O34	MP-IN	0 (DISABLE) / 1 (ENABLE)	0	0
O35	VIRGIN-MODE	0 (DISABLE) / 1 (ENABLE)	0	0
O36	WHITE-TEMP	0 (3 MODES) / 1 (5 MODES)	0	0
O37	LK MENU	0 (DISABLE) / 1 (ENABLE)	0	0

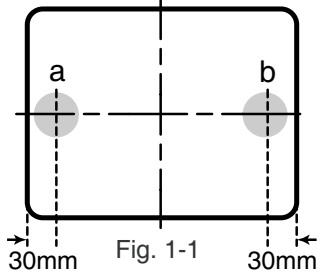
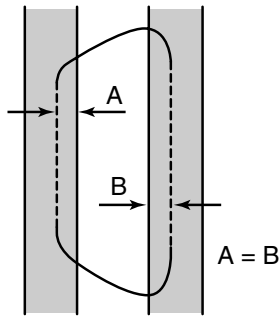
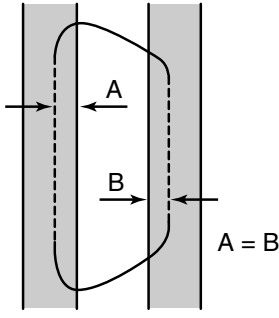
[2] ADJUSTMENT

ADJUSTMENT PRECAUTION: Make sure TV Set is in "Normal Condition" before switch to Service Mode for Adjustment.

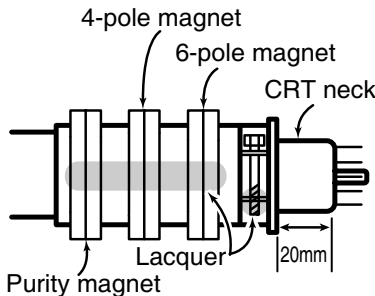
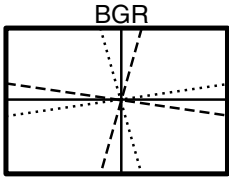
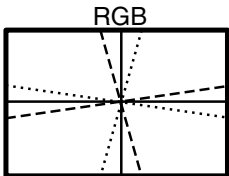
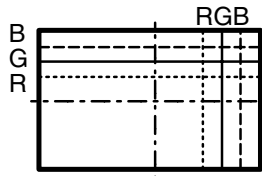
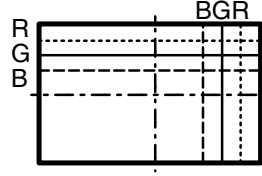
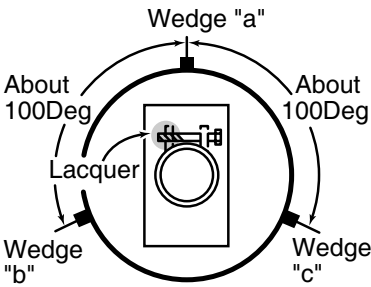
1. PIF ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	Tuner IFT (PRESET)	1. Get the tuner ready to receive the CH. E - 9 signal, but with no signal input. Adjust the PLL data. 2. Connect the sweep generator's output cable to the tuner antenna. (RF SWEEP) 3. Adjust the sweep generator's to 80dBμV. 4. Connect the response lead (use LOW IMPEDANCE probe with wave detector ; see Fig.1) to the tuner's IF output terminal. (This terminal must have the probe alone connected). 5. Set the RF AGC to 0 - 6 V with no saturation with the waveform. 6. Adjust the tuner IF coil to obtain the waveform as shown in Fig. 2. Note: Be sure to keep the tuner cover in position during this adjustment.	 Fig.1  Fig.2
2	RF-AGC TAKE OVER POINT AD- JUSTMENT (I²C BUS CONTROL) (AUTO & MANUAL ADJ)	 • Bias box: About 4.5 V Fig. 3-1	* for Auto ADJ 1) Receive "PAL COLOUR BAR" signal. signal strength: 56 $\pm$ 1dBμV(75 ohm open)** 1) Go to service mode. 2) Go to service data V01, press R/C to operate auto key (Hex C1) and confirm the 'OK' display on the screen. 3) If appear NG, increase data some step and pls repeat step2. 4) Proceed step 4 & 5 in manual mode.

2. PURITY ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	PURITY ADJ. (No need if used ITC CRT)	1. Receive the GREEN-ONLY signal. Adjust the beam current to $\sim 700 \mu\text{A}$. 2. Degauss the CRT enough with the degaussing coil. Note: Follow the Job Instruction Sheet to adjust the magnetic field. (Reference: page 3-5) 3. Maintain the purity magnet at the zero magnetic field and keep the static convergence roughly adjusted. 4. Observe the points a, b, as shown in Fig. 1-1 through the microscope. Adjust the landings to A rank requirement. 5. Orient the raster rotation to 0 eastward. 6. Tighten up the deflection coil screws. • Tightening torque: $108 \pm 20 \text{ N}$ ($11 \text{ kgf} \pm 2 \text{ kgf}$) 7. Make sure the CRT corners landing meet the A rank requirements. If not, stick the magnet sheet to correct it. Note: This adjustment must be done after warming up the unit for 30 minutes or longer with a beam current over $700 \mu\text{A}$. Note: Set to service mode by remote controller then press factory process R/C RGB key to change to RGB mono colour mode. * For the following colours press R/C RGB(Hex 7E) key to change. <pre> graph LR GREEN[GREEN ONLY] --> BLUE[BLUE ONLY] BLUE --> RED[RED ONLY] RED --> Signal[Signal-colour screen cleared] Signal --> GREEN </pre>	 Fig. 1-1  Fig. 1-2 Rank "A" (on the right of the CRT)  Fig. 1-3 Rank "A" (on the left of the CRT) * Press R/C RGB key for 1 second in NORMAL MODE, the colour will change to RGB mono colour mode.

3. CONVERGENCE ADJUSTMENT

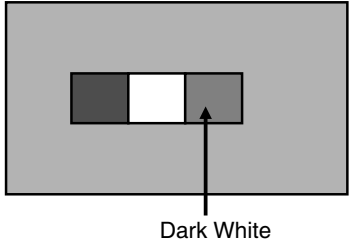
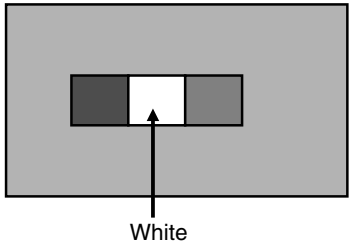
No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	CONVERGENCE ADJ. (To be done after the purity adjustment.) (No need if used ITC CRT)	1. Receive the "Crosshatch Pattern" signal. 2. Using the remote controller, call NORMAL mode. Static convergence 1. Turn the 4-pole magnet to a proper opening angle in order to superpose the blue and red colours. 2. Turn the 6-pole magnet to a proper opening angle in order to superpose the green colour over the blue and red colours. Dynamic convergence 1. Adjust the convergence on the fringes of the screen in the following steps. a) Fig. a: Drive the wedge at point "a" and swing the deflection coil upward. b) Fig. b: Drive the wedge at point "b" and "c" and swing the deflection coil downward. c) Fig. c: Drive the "c" wedge deeper and swing the deflection coil rightward. d) Fig. d: Drive the "b" wedge deeper and swing the deflection coil leftward. 2. Fix all the wedges on the CRT and apply glass tape over them. 3. Apply lacquer to the deflection yoke lock screw, magnet unit (purity, 4-pole, 6-pole magnets) and magnet unit lock screw. Finally received the Red-only and Blue-only signals to make sure there is no other colours on the screen. 	 Fig. a  Fig. b  Fig. c  Fig. d 

4. H-VCO, VIF-VCO & S-TRAP fo ADJUSTMENT

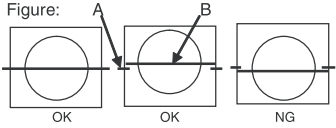
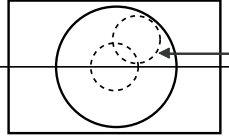
No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	H-VCO ADJ (I²C BUS CONTROL) (AUTO & MANUAL ADJ)	(MANUAL ADJ) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V03 . 3) Connect oscilloscope to IC801 pin13 (H-OUT) , adj V03 until freq become 15.625 ± 0.15 KHz (Auto Adj) 1) In No signal (RASTER) condition. 2) Go to service mode. 3) Choose service data V03 , by pressing R/C Auto (Hex C1) key, OSD will appear "OK" at screen. 4) If appear "NG" pls repeat step 3.	
2	VIF-VCO ADJ (I²C BUS CONTROL) (AUTO & MANUAL ADJ)	(Manual ADJ) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V02 . 3) Connect oscilloscope to IC801 pin7 (AFT) , adj V02 until voltage become 2.5 ± 1 V . (Auto Adj) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V02 . 3) Press the R/C Auto (Hex C1) key, OSD will appear "OK" at screen. 4) If appear "NG" pls repeat step 3.	This adjustment must be done after aging at least 3 minutes.
3	S-TRAP fo ADJ (I²C BUS CONTROL) (AUTO & MANUAL ADJ)	(Manual ADJ) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V21 . 3) Connect oscilloscope to TP 801 , adj V21 until voltage become Min (below 5 V). 4) After that pls adj service data V20 same as "V21", V22 to "V21+1", V23 to "V21-2" . (Auto Adj) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V21 . (S-TRAP I). 3) Press the R/C Auto (Hex C1) key, OSD will appear "OK" at screen. 4) If appear "NG" pls repeat step 3. 5) Adjust V24 (S-TRAP 574) by repeating step 3 & 4 at final line after aging TV set to get accurate data.	*CAUTION : Make sure to adjust V24 at final line after aging the TV set.

5. SCREEN, WHITE BALANCE, SUB-BRIGHTNESS & SUB-CONTRAST ADJUSTMENT

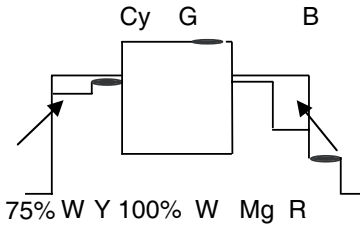
No.	Adjustment point	Adjustment procedure/conditions	Waveform and others																				
1	SCREEN ADJUSTMENT (I ² C BUS CONTROL)	1) In window pattern signal condition. 2) Go to service mode, then select V00. 3) By pressing R/C key S-Mute (Hex E8), R-D auto switch to 63, B-D auto switch to 63, R-C auto switch to 127, G-C auto switch to 127, B-C auto switch to 127, Sub-brightness V06 auto switch to 127. Y-mute & Vertical off, screen will be in vertical cut-off condition. 4) Adjust the Screen so that cut-off line appear in low bright, then judge that whether the cut-off line appear in Red or Green or Blue color, in this condition between R-C & G-C & B-C, fix the data of the color appear in cut-off line and adj the other two cut-off data (Note 1) so that cut-off line color become white. 5) Turn the screen VR of FBT so that cut-off line just disappear and use R/C by pressing key S-Mute (Hex E8) to disable the Y-mute & V-cut so that picture appear in normal mode.	<table><tr><td>R-CUTOFF (R-C) UP</td><td>RC key "1" (HEX 80)</td></tr><tr><td>R-CUTOFF (R-C) DOWN</td><td>RC key "4" (HEX 20)</td></tr><tr><td>G-CUTOFF (G-C) UP</td><td>RC key "2" (HEX 40)</td></tr><tr><td>G-CUTOFF (G-C) DOWN</td><td>RC key "5" (HEX A0)</td></tr><tr><td>B-CUTOFF (B-C) UP</td><td>RC key "3" (HEX C0)</td></tr><tr><td>B-CUTOFF (B-C) DOWN</td><td>RC key "6" (HEX 60)</td></tr><tr><td>R-DRIVE (R-D) UP</td><td>RC key "7" (HEX E0)</td></tr><tr><td>R-DRIVE (R-D) DOWN</td><td>RC key "Flashback" (HEX E4)</td></tr><tr><td>B-DRIVE (B-D) UP</td><td>RC key "8" (HEX 10)</td></tr><tr><td>B-DRIVE (B-D) DOWN</td><td>RC key "0" (HEX 50)</td></tr></table>	R-CUTOFF (R-C) UP	RC key "1" (HEX 80)	R-CUTOFF (R-C) DOWN	RC key "4" (HEX 20)	G-CUTOFF (G-C) UP	RC key "2" (HEX 40)	G-CUTOFF (G-C) DOWN	RC key "5" (HEX A0)	B-CUTOFF (B-C) UP	RC key "3" (HEX C0)	B-CUTOFF (B-C) DOWN	RC key "6" (HEX 60)	R-DRIVE (R-D) UP	RC key "7" (HEX E0)	R-DRIVE (R-D) DOWN	RC key "Flashback" (HEX E4)	B-DRIVE (B-D) UP	RC key "8" (HEX 10)	B-DRIVE (B-D) DOWN	RC key "0" (HEX 50)
R-CUTOFF (R-C) UP	RC key "1" (HEX 80)																						
R-CUTOFF (R-C) DOWN	RC key "4" (HEX 20)																						
G-CUTOFF (G-C) UP	RC key "2" (HEX 40)																						
G-CUTOFF (G-C) DOWN	RC key "5" (HEX A0)																						
B-CUTOFF (B-C) UP	RC key "3" (HEX C0)																						
B-CUTOFF (B-C) DOWN	RC key "6" (HEX 60)																						
R-DRIVE (R-D) UP	RC key "7" (HEX E0)																						
R-DRIVE (R-D) DOWN	RC key "Flashback" (HEX E4)																						
B-DRIVE (B-D) UP	RC key "8" (HEX 10)																						
B-DRIVE (B-D) DOWN	RC key "0" (HEX 50)																						
2	WHITE BALANCE ADJ (to be done after screen adj) (I ² C BUS CONTROL)	1) WHITE (HIGH BEAM) (In Window Pattern Signal) First use Minolta Color Analyzer CA100, let the gun point at Dark White position (as drawing attach), Adj V06 until LUMINANCE Y become 5 cd/m2, then let the gun point at White position (as drawing attach), Adj V04 until LUMINANCE Y become: 160 cd/m2. Adj the R-D & B-D until the axis of color temperature become 12300°K X : 0.272 Y : 0.275 2) DARK WHITE (LOW BEAM) (In Window Pattern Signal) Let the gun point at Dark White position, if the color temperature data shift away from the data adjusted in step 1, adjust R-C, G-C & B-C but between them, first color appears in Screen adj item 1)-4 is fixed, adj the other two so that to obtain the similar axis as above. ** Repeat step 1 & 2 to get a regulated position	WINDOW PATTERN SIGNAL *Note : Signal using W/B Pattern Generator SX-1006 (IWATSU) or equivalent. Window Pattern Signal output level are as above:																				

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
3	SUB-BRIGHTNESS (to be done after screen, white balance adj) (12C BUS CONTROL)	1) In Window Pattern Signal condition. 2) Using Minolta Color Analyzer CA-100, let the gun point at Dark White position (as attach drawing), adjust V06 Bus data until LUMINANCE Y = 3 ± 0.5 cd/m² .	WINDOW PATTERN SIGNAL 
4	SUB-CONTRAST (to be done after screen, white balance adj, sub-brightness adj) (12C BUS CONTROL)	1) In Window Pattern Signal condition. 2) Using Minolta Color Analyzer CA-100, let the gun point at White position (as attach drawing), adjust V04 Bus data until LUMINANCE Y = 160 ± 10 cd/m²	WINDOW PATTERN SIGNAL 
5	Beam Current Check	1) Receive the "Monoscope Pattern" signal. 2) Press R/C to set Picture NORMAL condition. 3) Connect the DC miliammeter between TP 603 (+) & TP 602 (-). (Full Scale: 3mA Range) 4) Beam current must be within $1100 \pm 100 \mu\text{A}$.	

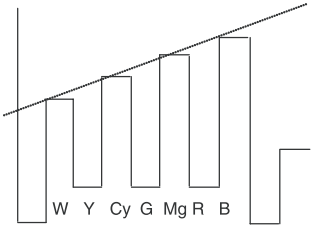
6. HORIZONTAL, VERTICAL, DEFLECTION LOOP and FOCUS ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	H-SHIFT (I²C BUS CONTROL) (to be done after purity adj)	1) Receive Monoscope Pattern Signal (PAL 50Hz). 2) Choose the service data V13 . 3) Adjust the V13 bus data to have a balance position to spec of A=B (as attach drawing). 4) If cannot make it to A=B , adjust from the best point so that B slightly smaller than A.	
2	V-SHIFT (I²C BUS CONTROL) (to be done after purity adj)	1) Receive Monoscope Pattern Signal (PAL 50Hz). 2) Choose the service data V12 . 3) Adjust the V12 bus data to have a most acceptable vertical position, the monoscope pattern should be Balance in vertical position. Note: B line (Monoscope middle line) must same or nearest higher position to the A mark (Tube middle mark), refer to the attach drawing.	Figure: 
3	V-SIZE (I²C BUS CONTROL) (to be done after purity, V-shift adj)	1) Receive Monoscope Pattern Signal (PAL 50Hz). 2) Choose the service data V11 . 3) Adjust V11 bus data until the overscan become $10 \pm 1.5\%$. Caution 1: Pls aging TV more than 10 minutes before adjustment Caution 2: for H-shift & V-shift & V-size adj, after adj pls switch to Monoscope pattern signal (NTSC 60 Hz) to confirm all positions are the same.	
4	SUB-SHARPNESS	1) Confirm Service data V08 & V32 are 38 .	
5	FOCUS	1) Receive the "Monoscope Pattern" signal. 2) Press R/C to set Picture NORMAL condition. 3) Adjust the focus control to get the best focusing.	 Focusing Point (middle of center and edge of monoscope pattern)

7. PAL CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SUB COLOUR (I²C BUS CONTROL) (to be done after sub-picture, sub-tint adj)	1) Receive the "PAL Colour Bar" signal. 2) Press R/C to set Picture Normal condition. 3) Connect the oscilloscope to R-Amp Transistor Base(JUMPER 401) Range : 100mV/Div (AC) (Using 10:1 Probe) Sweep Time : 10 msec/Div 4) Using the R/C call V05 in SERVICE mode. Adjust V05 bus data, so that the 75% White & Red portions of PAL Colour Bar be at the same level shown as Fig 1-1. 5) Clear the SERVICE mode.	 Fig. 1-1

8. NTSC CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SUB-TINT (I²C BUS CONTROL)	1) Receive the "NTSC 3.58 Color Bar" signal thru AV in. 2) Connect the oscilloscope to B-Amp Transistor Base (JUMPER 410). • Range : 100mV/Div.(AC)(Use Probe 10:1) • Sweep time : 10 μsec/Div. 3) In Service mode, go to V07, press R/C Y-mute (Hex F4) or FLASHBACK Key. 4) Call the "V07" data in service mode. Adjust the "V07" bus data to obtain the waveform shown as Fig. 1-1. 5) Disable Y-Mute by pressing key (Hex E4) or FLASHBACK, then clear the SERVICE mode.	 Fig.1-1

9. PROTECTOR OPERATION CHECKING

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	BEAM PROTECTOR	1) Receive "Monoscope Pattern" signal. 2) Set CONTRAST MAX. 3) Set BRIGHT MAX. 4) During the Collector & Emitter of Q853/4/5 short, make sure the protector ON and switch to standby mode.	* Select one of Q853/4/5 to do each short.
2	H, V PROTECTOR	1) Receive "Monoscope Pattern" signal. 2) Connect output of Bias Box to D602 cathode (C602 positive). 3) Set voltage of Bias Box to 18V and make sure the protector is not working. 4) Set voltage of Bias Box to 27V, and make sure the protector is working.	
3	OTHER PROTECTOR	1) Once finish rectified Electrolytic Capacitor short testing in +B line, check all possible damaged components on +B line. (Use random selected set for inspection)	

10. A/V INPUT, OUTPUT CHECKING

NO	ADJUSTMENT POINT	ADJUSTMENT CONDITION / PROCEDURE	WAVEFORM OR OTHERS
1	VIDEO AND AUDIO OUTPUT CHECK	(1) Receive the "PAL Color Bar" signal (100% White Color Bar, Sound 400 Hz 100% Mod). (2) Terminate the Video output with a 75 ohm impedance. Make sure the output is as specified (1.0 V_{p-p} ± 3 dB). (3) Terminate the Audio output with a 10K ohm impedance. Make sure the O/P is as specified (1.5 V_{p-p} ± 3 dB)	
2	VIDEO AND AUDIO INPUT CHECK	(1) Using the TV/VIDEO key on the remote controller, make sure that the modes change in order of TV, AV1, AV2 & TV* again and the video & audio output are according to the input terminal for each mode. (2) Video cross-talk AV to TV checking : a) When connect AV1 input, check TV also b) When connect AV2 input, check TV also (Model 21F-PT220 only)	*CAUTION : - 21F-PA18, 21F-PA18(B), 21F-PD250 Change in order of TV is AV & TV - 21F-PT220 Change in order of TV is AV1, AV2 & TV

11. FUNCTION OPERATION CHECKING (VIDEO AND AUDIO)

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	CONTRAST key	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select CONTRAST. 3) Press Volume Up/Down key to check whether the CONTRAST effect is OK or not.	
2	COLOUR key	1) Receive "Colour Bar" signal. 2) Set MENU, then go into PICTURE mode to select COLOUR. 3) Press Volume Up/Down key to check whether the COLOUR effect is OK or not.	
3	BRIGHTNESS key	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select BRIGHTNESS. 3) Press Volume Up/Down key to check whether the BRIGHTNESS effect is OK or not.	
4	TINT key	1) Receive the "NTSC Colour Bar" signal thru AV in. 2) Set MENU, then go into PICTURE mode to select TINT. 3) Press Volume Up/Down key to check TINT, UP for GREEN direction and DOWN for PURPLE direction whether is OK or not.	
5	SHARPNESS Key	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select SHARPNESS. 3) Press Volume Up/Down key to check whether the SHARPNESS effect is OK or not.	
6	CH DISPLAY COLOUR	1) All Ch (0~99) will have an OSD display of the channel number in green colour under AFT ON condition.	

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others								
7	NORMAL Key	1) Once in PICTURE Mode, and the NORMAL key is pressed, all the settings will be preset to normal setting accordingly. PICTURE MODE CONTRAST 60 COLOUR +6 BRIGHTNESS 0 TINT CENTER SHARPNESS +6 WHITE TEMP Mid	*Note: In NORMAL Mode, when press NORMAL key, will appear NORMAL OSD and all setting PICTURE function set to NORMAL.								
8	WHITE TEMP	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select WHITE TEMP 3) Press Volume Up/Down key to check WHITE TEMP function The back ground will change to (shift right) bluish and (shift left) reddish.									
9	COLOUR SYSTEM	1) Receive the "PAL COLOUR BAR" signal, press MENU, choose CH-SETTING to select COLOR modes except PAL, check the COLOUR is not working properly. Then, select the "PAL" mode. Check again its colour so that it is working properly. 2) Receive "NTSC 4.43" signal, press MENU, choose CH-SETTING to select COLOR modes except N443, check the COLOUR is not working properly. Then, select the N443 mode. Check again its colour so that it is working properly. 3) Receive "NTSC 3.58" signal thru AV, press MENU, choose CH-SETTING to select COLOR modes except N358, check the COLOUR is not working properly. Then, select the N358 mode. Check again its colour so that it is working properly.									
10	SOUND SYSTEM	1) Receive "PAL-B/G" signal, press the "SOUND SYSTEM" to select D/K. Check the sound output in not working properly. Select B/G and check the sound output to make sure it is working properly. 2) Receive "PAL-D/K" signal, press the "SOUND SYSTEM" to select B/G. Check the sound output in not working properly. Select D/K and check the sound output to make sure it is working properly.									
11	OSD LANGUAGE QUANTITY CHECK	1) Check OSD LANGUAGE quantity and type for respect model. <table border="1"> <tr> <td>MODEL</td><td>QUANTITY</td><td>ENGLISH</td><td>THAI</td></tr> <tr> <td>ALL MODEL</td><td>2</td><td>O</td><td>O</td></tr> </table>	MODEL	QUANTITY	ENGLISH	THAI	ALL MODEL	2	O	O	
MODEL	QUANTITY	ENGLISH	THAI								
ALL MODEL	2	O	O								

12. SHOCK TEST CHECKING

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SHOCK TEST	1) Hit at the top of TV set for two time. 2) Check TV set not damage and TV operation operate correctly.	

CHAPTER 4. MEMORY MAP

[1] MEMORY MAP

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 1										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
										MANAGER			MANAGER			MANAGER					
										CHIEF			CHIEF			CHIEF					
										ENGINEER			TAM			ENGINEER			ENGINEER		

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 2										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
										MANAGER				MANAGER				MANAGER			
										CHIEF				CHIEF				CHIEF		MATSUNAGA ISMAIL	
								ENGINEER Tan		ENGINEER				ENGINEER		CHIN					
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)		DATA								MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL	REMARK			
		D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA				
40		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 28			
41		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
42		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 29			
43		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
44		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 30			
45		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
46		TUNING FREQUENCY (LOW BYTE)									00-FF	2B						POS 31			
47		TUNING FREQUENCY (HIGH BYTE)									00-FF	0A									
48		TUNING FREQUENCY (LOW BYTE)									00-FF	1B						POS 32			
49		TUNING FREQUENCY (HIGH BYTE)									00-FF	0B									
4A		TUNING FREQUENCY (LOW BYTE)									00-FF	6B						POS 33			
4B		TUNING FREQUENCY (HIGH BYTE)									00-FF	10									
4C		TUNING FREQUENCY (LOW BYTE)									00-FF	5B						POS 34			
4D		TUNING FREQUENCY (HIGH BYTE)									00-FF	11									
4E		TUNING FREQUENCY (LOW BYTE)									00-FF	23						POS 35			
4F		TUNING FREQUENCY (HIGH BYTE)									00-FF	12									
50		TUNING FREQUENCY (LOW BYTE)									00-FF	13						POS 36			
51		TUNING FREQUENCY (HIGH BYTE)									00-FF	13									
52		TUNING FREQUENCY (LOW BYTE)									00-FF	03						POS 37			
53		TUNING FREQUENCY (HIGH BYTE)									00-FF	14									
54		TUNING FREQUENCY (LOW BYTE)									00-FF	93						POS 38			
55		TUNING FREQUENCY (HIGH BYTE)									00-FF	33									
56		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 39			
57		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
58		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 40			
59		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
5A		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 41			
5B		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
5C		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 42			
5D		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
5E		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 43			
5F		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
60		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 44			
61		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
62		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 45			
63		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
64		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 46			
65		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
66		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 47			
67		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF						POS 48			
68		TUNING FREQUENCY (LOW BYTE)									00-FF	FF									
69		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
6A		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 49			
6B		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
6C		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 50			
6D		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
6E		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 51			
6F		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
70		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 52			
71		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
72		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 53			
73		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
74		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 54			
75		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
76		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 55			
77		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
78		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 56			
79		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF						POS 57			
7A		TUNING FREQUENCY (LOW BYTE)									00-FF	FF									
7B		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
7C		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 58			
7D		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
7E		TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 59			
7F		TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
MODEL										MODEL											
LETTER NO.										LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING				
EEPROM CHECK DATA LIST 3										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007				
										MANAGER			MANAGER			MANAGER			MATSUNAGA	
										CHIEF			CHIEF			CHIEF			ISMAIL	
										ENGINEER		Tan		ENGINEER			ENGINEER		CHIN	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																				
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST RETIAL SETTING DATA	REMARK			
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE					
80	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 60			
81	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
82	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 61			
83	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
84	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 62			
85	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
86	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 63			
87	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
88	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 64			
89	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
8A	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 65			
8B	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
8C	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 66			
8D	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
8E	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 67			
8F	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
90	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 68			
91	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
92	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 69			
93	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
94	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 70			
95	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
96	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 71			
97	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
98	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 72			
99	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
9A	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 73			
9B	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
9C	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 74			
9D	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
9E	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 75			
9F	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
A0	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 76			
A1	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
A2	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 77			
A3	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
A4	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 78			
A5	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
A6	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 79			
A7	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF						POS 80			
A8	TUNING FREQUENCY (LOW BYTE)									00-FF	FF									
A9	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
AA	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 81			
AB	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
AC	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 82			
AD	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
AE	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 83			
AF	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF						POS 84			
B0	TUNING FREQUENCY (LOW BYTE)									00-FF	FF									
B1	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF						POS 85			
B2	TUNING FREQUENCY (LOW BYTE)									00-FF	FF									
B3	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF						POS 86			
B4	TUNING FREQUENCY (LOW BYTE)									00-FF	FF									
B5	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
B6	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 87			
B7	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
B8	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 88			
B9	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
BA	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 89			
BB	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
BC	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 90			
BD	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
BE	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 91			
BF	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF									
MODEL										MODEL										
LETTER NO.										LETTER NO.										

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING															
EEPROM CHECK DATA LIST 4										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007															
										MANAGER				MANAGER				MANAGER		MATSUNAGA											
										CHIEF				CHIEF				CHIEF		ISMAIL											
										ENGINEER		Tan		ENGINEER				ENGINEER		CHIN											
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																															
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK														
	D7	D6	D5	D4	D3	D2	D1	D0			CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	BETTING DATA																
C0	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 92														
C1	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
C2	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 93														
C3	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
C4	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 94														
C5	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
C6	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 95														
C7	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
C8	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 96														
C9	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
CA	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 97														
CB	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
CC	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 98														
CD	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
CE	TUNING FREQUENCY (LOW BYTE)									00-FF	FF						POS 99														
CF	TUNING FREQUENCY (HIGH BYTE)									00-FF	FF																				
D0	FAVORITE CHANNEL 1								0A	00-FB	0A						POS 10														
D1	FAVORITE CHANNEL 2								14	00-FB	14																				
D2	FAVORITE CHANNEL 3								1E	00-FB	1E						POS 20														
D3	FAVORITE CHANNEL 4								28	00-FB	28																				
D4									00	00-09	00						POS 30														
D5									00	00-09	00																				
D6									00	00-09	00						POS 40														
D7									00	00-09	00																				
D8									00	00-01	00						1= AFT ON, 0=AFT OFF														
D9									01	00-01	01																				
DA									00	00-02	00						1= SKIP ON, 0=SKIP OFF														
DB																															
DC																															
DD																															
DE									08	00-18	EF																				
DF																															
E0	POS 7	POS 6	POS 5	POS4	POS 3	POS 2	POS 1	POS 0	FF	00-FF	FF																				
E1	POS15	POS14	POS13	POS12	POS11	POS10	POS 9	POS 8	FF	00-FF	FF																				
E2	POS23	POS22	POS21	POS20	POS19	POS18	POS17	POS16	FF	00-FF	FF																				
E3	POS31	POS30	POS29	POS28	POS27	POS26	POS25	POS24	FF	00-FF	FF																				
E4	POS39	POS38	POS37	POS36	POS35	POS34	POS33	POS32	FF	00-FF	FF																				
E5	POS47	POS46	POS45	POS44	POS43	POS42	POS41	POS40	FF	00-FF	FF																				
E6	POS55	POS54	POS53	POS52	POS51	POS50	POS49	POS48	FF	00-FF	FF																				
E7	POS63	POS62	POS61	POS60	POS59	POS58	POS57	POS56	FF	00-FF	FF																				
E8	POS71	POS70	POS69	POS68	POS67	POS66	POS65	POS64	FF	00-FF	FF																				
E9	POS79	POS78	POS77	POS76	POS75	POS74	POS73	POS72	FF	00-FF	FF																				
EA	POS87	POS86	POS85	POS84	POS83	POS82	POS81	POS80	FF	00-FF	FF																				
EB	POS95	POS94	POS93	POS92	POS91	POS90	POS89	POS88	FF	00-FF	FF																				
EC	POS103	POS102	POS101	POS100	POS99	POS98	POS97	POS96	FF	00-0F	FF																				
ED																															
EE	Blue Back								00	00-FF	00																				
EF									00	00-3C	3C																				
F0	POS 7	POS 6	POS 5	POS4	POS 3	POS 2	POS 1	POS 0	01	00-FF	01																				
F1	POS15	POS14	POS13	POS12	POS11	POS10	POS 9	POS 8	00	00-FF	00																				
F2	POS23	POS22	POS21	POS20	POS19	POS18	POS17	POS16	00	00-FF	00																				
F3	POS31	POS30	POS29	POS28	POS27	POS26	POS25	POS24	00	00-FF	00																				
F4	POS39	POS38	POS37	POS36	POS35	POS34	POS33	POS32	00	00-FF	00																				
F5	POS47	POS46	POS45	POS44	POS43	POS42	POS41	POS40	00	00-FF	00																				
F6	POS55	POS54	POS53	POS52	POS51	POS50	POS49	POS48	00	00-FF	00																				
F7	POS63	POS62	POS61	POS60	POS59	POS58	POS57	POS56	00	00-FF	00																				
F8	POS71	POS70	POS69	POS68	POS67	POS66	POS65	POS64	00	00-FF	00																				
F9	POS79	POS78	POS77	POS76	POS75	POS74	POS73	POS72	00	00-FF	00																				
FA	POS87	POS86	POS85	POS84	POS83	POS82	POS81	POS80	00	00-FF	00																				
FB	POS95	POS94	POS93	POS92	POS91	POS90	POS89	POS88	00	00-FF	00																				
FC	POS103	POS102	POS101	POS100	POS99	POS98	POS97	POS96	00	00-0F	00																				
FD	POWER								AA	AA(On), 55(Off)	AA																				
FE																															
FF																															
MODEL																MODEL															
LETTER NO.																LETTER NO.															

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING		
EEPROM CHECK DATA LIST 5										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007		
										MANAGER		MANAGER		MANAGER		MATSUNAGA		
										CHIEF		CHIEF		CHIEF		ISMAIL		
										ENGINEER		Tan		ENGINEER		ENGINEER		CHIN
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																		
ADDRESS (HEX)	DATA								MCON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			
100	ANT-BOOSTER (POS0)		S-SYSTEM (POS0)			C-SYSTEM (POS0)			00	00-9C	00						S-SYSTEM	
101	ANT-BOOSTER (POS1)		S-SYSTEM (POS1)			C-SYSTEM (POS1)			00	00-9C	00						0: B/G	
102	ANT-BOOSTER (POS2)		S-SYSTEM (POS2)			C-SYSTEM (POS2)			00	00-9C	00						1: I	
103	ANT-BOOSTER (POS3)		S-SYSTEM (POS3)			C-SYSTEM (POS3)			00	00-9C	00						2: D/K	
104	ANT-BOOSTER (POS4)		S-SYSTEM (POS4)			C-SYSTEM (POS4)			00	00-9C	00						3: M	
105	ANT-BOOSTER (POS5)		S-SYSTEM (POS5)			C-SYSTEM (POS5)			00	00-9C	00						C-SYSTEM	
106	ANT-BOOSTER (POS6)		S-SYSTEM (POS6)			C-SYSTEM (POS6)			00	00-9C	00						0: AUTO	
107	ANT-BOOSTER (POS7)		S-SYSTEM (POS7)			C-SYSTEM (POS7)			00	00-9C	00						1: PAL	
108	ANT-BOOSTER (POS8)		S-SYSTEM (POS8)			C-SYSTEM (POS8)			00	00-9C	00						2: SECAM	
109	ANT-BOOSTER (POS9)		S-SYSTEM (POS9)			C-SYSTEM (POS9)			00	00-9C	00						3: N443	
10A	ANT-BOOSTER (POS10)		S-SYSTEM (POS10)			C-SYSTEM (POS10)			00	00-9C	00						4: N358	
10B	ANT-BOOSTER (POS11)		S-SYSTEM (POS11)			C-SYSTEM (POS11)			00	00-9C	00						ANT-BOOSTER	
10C	ANT-BOOSTER (POS12)		S-SYSTEM (POS12)			C-SYSTEM (POS12)			00	00-9C	00						0: OFF	
10D	ANT-BOOSTER (POS13)		S-SYSTEM (POS13)			C-SYSTEM (POS13)			00	00-9C	00						1: ON 1	
10E	ANT-BOOSTER (POS14)		S-SYSTEM (POS14)			C-SYSTEM (POS14)			00	00-9C	00						2: ON 2	
10F	ANT-BOOSTER (POS15)		S-SYSTEM (POS15)			C-SYSTEM (POS15)			00	00-9C	00							
110	ANT-BOOSTER (POS16)		S-SYSTEM (POS16)			C-SYSTEM (POS16)			00	00-9C	00							
111	ANT-BOOSTER (POS17)		S-SYSTEM (POS17)			C-SYSTEM (POS17)			00	00-9C	00							
112	ANT-BOOSTER (POS18)		S-SYSTEM (POS18)			C-SYSTEM (POS18)			00	00-9C	00							
113	ANT-BOOSTER (POS19)		S-SYSTEM (POS19)			C-SYSTEM (POS19)			00	00-9C	00							
114	ANT-BOOSTER (POS20)		S-SYSTEM (POS20)			C-SYSTEM (POS20)			00	00-9C	00							
115	ANT-BOOSTER (POS21)		S-SYSTEM (POS21)			C-SYSTEM (POS21)			00	00-9C	00							
116	ANT-BOOSTER (POS22)		S-SYSTEM (POS22)			C-SYSTEM (POS22)			00	00-9C	00							
117	ANT-BOOSTER (POS23)		S-SYSTEM (POS23)			C-SYSTEM (POS23)			00	00-9C	00							
118	ANT-BOOSTER (POS24)		S-SYSTEM (POS24)			C-SYSTEM (POS24)			00	00-9C	00							
119	ANT-BOOSTER (POS25)		S-SYSTEM (POS25)			C-SYSTEM (POS25)			00	00-9C	00							
11A	ANT-BOOSTER (POS26)		S-SYSTEM (POS26)			C-SYSTEM (POS26)			00	00-9C	00							
11B	ANT-BOOSTER (POS27)		S-SYSTEM (POS27)			C-SYSTEM (POS27)			00	00-9C	00							
11C	ANT-BOOSTER (POS28)		S-SYSTEM (POS28)			C-SYSTEM (POS28)			00	00-9C	00							
11D	ANT-BOOSTER (POS29)		S-SYSTEM (POS29)			C-SYSTEM (POS29)			00	00-9C	00							
11E	ANT-BOOSTER (POS30)		S-SYSTEM (POS30)			C-SYSTEM (POS30)			00	00-9C	00							
11F	ANT-BOOSTER (POS31)		S-SYSTEM (POS31)			C-SYSTEM (POS31)			00	00-9C	18							
120	ANT-BOOSTER (POS32)		S-SYSTEM (POS32)			C-SYSTEM (POS32)			00	00-9C	18							
121	ANT-BOOSTER (POS33)		S-SYSTEM (POS33)			C-SYSTEM (POS33)			00	00-9C	18							
122	ANT-BOOSTER (POS34)		S-SYSTEM (POS34)			C-SYSTEM (POS34)			00	00-9C	18							
123	ANT-BOOSTER (POS35)		S-SYSTEM (POS35)			C-SYSTEM (POS35)			00	00-9C	18							
124	ANT-BOOSTER (POS36)		S-SYSTEM (POS36)			C-SYSTEM (POS36)			00	00-9C	18							
125	ANT-BOOSTER (POS37)		S-SYSTEM (POS37)			C-SYSTEM (POS37)			00	00-9C	18							
126	ANT-BOOSTER (POS38)		S-SYSTEM (POS38)			C-SYSTEM (POS38)			00	00-9C	18							
127	ANT-BOOSTER (POS39)		S-SYSTEM (POS39)			C-SYSTEM (POS39)			00	00-9C	00							
128	ANT-BOOSTER (POS40)		S-SYSTEM (POS40)			C-SYSTEM (POS40)			00	00-9C	00							
129	ANT-BOOSTER (POS41)		S-SYSTEM (POS41)			C-SYSTEM (POS41)			00	00-9C	00							
12A	ANT-BOOSTER (POS42)		S-SYSTEM (POS42)			C-SYSTEM (POS42)			00	00-9C	00							
12B	ANT-BOOSTER (POS43)		S-SYSTEM (POS43)			C-SYSTEM (POS43)			00	00-9C	00							
12C	ANT-BOOSTER (POS44)		S-SYSTEM (POS44)			C-SYSTEM (POS44)			00	00-9C	00							
12D	ANT-BOOSTER (POS45)		S-SYSTEM (POS45)			C-SYSTEM (POS45)			00	00-9C	00							
12E	ANT-BOOSTER (POS46)		S-SYSTEM (POS46)			C-SYSTEM (POS46)			00	00-9C	00							
12F	ANT-BOOSTER (POS47)		S-SYSTEM (POS47)			C-SYSTEM (POS47)			00	00-9C	00							
130	ANT-BOOSTER (POS48)		S-SYSTEM (POS48)			C-SYSTEM (POS48)			00	00-9C	00							
131	ANT-BOOSTER (POS49)		S-SYSTEM (POS49)			C-SYSTEM (POS49)			00	00-9C	00							
132	ANT-BOOSTER (POS50)		S-SYSTEM (POS50)			C-SYSTEM (POS50)			00	00-9C	00							
133	ANT-BOOSTER (POS51)		S-SYSTEM (POS51)			C-SYSTEM (POS51)			00	00-9C	00							
134	ANT-BOOSTER (POS52)		S-SYSTEM (POS52)			C-SYSTEM (POS52)			00	00-9C	00							
135	ANT-BOOSTER (POS53)		S-SYSTEM (POS53)			C-SYSTEM (POS53)			00	00-9C	00							
136	ANT-BOOSTER (POS54)		S-SYSTEM (POS54)			C-SYSTEM (POS54)			00	00-9C	00							
137	ANT-BOOSTER (POS55)		S-SYSTEM (POS55)			C-SYSTEM (POS55)			00	00-9C	00							
138	ANT-BOOSTER (POS56)		S-SYSTEM (POS56)			C-SYSTEM (POS56)			00	00-9C	00							
139	ANT-BOOSTER (POS57)		S-SYSTEM (POS57)			C-SYSTEM (POS57)			00	00-9C	00							
13A	ANT-BOOSTER (POS58)		S-SYSTEM (POS58)			C-SYSTEM (POS58)			00	00-9C	00							
13B	ANT-BOOSTER (POS59)		S-SYSTEM (POS59)			C-SYSTEM (POS59)			00	00-9C	00							
13C	ANT-BOOSTER (POS60)		S-SYSTEM (POS60)			C-SYSTEM (POS60)			00	00-9C	00							
13D	ANT-BOOSTER (POS61)		S-SYSTEM (POS61)			C-SYSTEM (POS61)			00	00-9C	00							
13E	ANT-BOOSTER (POS62)		S-SYSTEM (POS62)			C-SYSTEM (POS62)			00	00-9C	00							
13F	ANT-BOOSTER (POS63)		S-SYSTEM (POS63)			C-SYSTEM (POS63)			00	00-9C	00							
MODEL										MODEL								
</																		

MEMORY MAP (Continued)

MODEL : GA-7 JXC129WJN1										SEM PCO SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING		
EEPROM CHECK DATA LIST 6										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007		
										MANAGER			MANAGER			MANAGER		
										CHIEF			CHIEF			CHIEF		
										ENGINEER			Tan			ENGINEER		
																CHIN		
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																		
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			
140	ANT-BOOSTER (POS64)			S-SYSTEM (POS64)				C-SYSTEM (POS64)	00	00-9C	00							
141	ANT-BOOSTER (POS65)			S-SYSTEM (POS65)				C-SYSTEM (POS65)	00	00-9C	00							
142	ANT-BOOSTER (POS66)			S-SYSTEM (POS66)				C-SYSTEM (POS66)	00	00-9C	00							
143	ANT-BOOSTER (POS67)			S-SYSTEM (POS67)				C-SYSTEM (POS67)	00	00-9C	00							
144	ANT-BOOSTER (POS68)			S-SYSTEM (POS68)				C-SYSTEM (POS68)	00	00-9C	00							
145	ANT-BOOSTER (POS69)			S-SYSTEM (POS69)				C-SYSTEM (POS69)	00	00-9C	00							
146	ANT-BOOSTER (POS70)			S-SYSTEM (POS70)				C-SYSTEM (POS70)	00	00-9C	00							
147	ANT-BOOSTER (POS71)			S-SYSTEM (POS71)				C-SYSTEM POS71)	00	00-9C	00							
148	ANT-BOOSTER (POS72)			S-SYSTEM (POS72)				C-SYSTEM (POS72)	00	00-9C	00							
149	ANT-BOOSTER (POS73)			S-SYSTEM (POS73)				C-SYSTEM (POS73)	00	00-9C	00							
14A	ANT-BOOSTER (POS74)			S-SYSTEM (POS74)				C-SYSTEM (POS74)	00	00-9C	00							
14B	ANT-BOOSTER (POS75)			S-SYSTEM (POS75)				C-SYSTEM (POS75)	00	00-9C	00							
14C	ANT-BOOSTER (POS76)			S-SYSTEM (POS76)				C-SYSTEM (POS76)	00	00-9C	00							
14D	ANT-BOOSTER (POS77)			S-SYSTEM (POS77)				C-SYSTEM (POS77)	00	00-9C	00							
14E	ANT-BOOSTER (POS78)			S-SYSTEM (POS78)				C-SYSTEM (POS78)	00	00-9C	00							
14F	ANT-BOOSTER (POS79)			S-SYSTEM (POS79)				C-SYSTEM (POS79)	00	00-9C	00							
150	ANT-BOOSTER (POS80)			S-SYSTEM (POS80)				C-SYSTEM (POS80)	00	00-9C	00							
151	ANT-BOOSTER (POS81)			S-SYSTEM (POS81)				C-SYSTEM (POS81)	00	00-9C	00							
152	ANT-BOOSTER (POS82)			S-SYSTEM (POS82)				C-SYSTEM (POS82)	00	00-9C	00							
153	ANT-BOOSTER (POS83)			S-SYSTEM (POS83)				C-SYSTEM (POS83)	00	00-9C	00							
154	ANT-BOOSTER (POS84)			S-SYSTEM (POS84)				C-SYSTEM (POS84)	00	00-9C	00							
155	ANT-BOOSTER (POS85)			S-SYSTEM (POS85)				C-SYSTEM (POS85)	00	00-9C	00							
156	ANT-BOOSTER (POS86)			S-SYSTEM (POS86)				C-SYSTEM (POS86)	00	00-9C	00							
157	ANT-BOOSTER (POS87)			S-SYSTEM (POS87)				C-SYSTEM (POS87)	00	00-9C	00							
158	ANT-BOOSTER (POS88)			S-SYSTEM (POS88)				C-SYSTEM (POS88)	00	00-9C	00							
159	ANT-BOOSTER (POS89)			S-SYSTEM (POS89)				C-SYSTEM (POS89)	00	00-9C	00							
15A	ANT-BOOSTER (POS90)			S-SYSTEM (POS90)				C-SYSTEM (POS90)	00	00-9C	00							
15B	ANT-BOOSTER (POS91)			S-SYSTEM (POS91)				C-SYSTEM (POS91)	00	00-9C	00							
15C	ANT-BOOSTER (POS92)			S-SYSTEM (POS92)				C-SYSTEM (POS92)	00	00-9C	00							
15D	ANT-BOOSTER (POS93)			S-SYSTEM (POS93)				C-SYSTEM (POS93)	00	00-9C	00							
15E	ANT-BOOSTER (POS94)			S-SYSTEM (POS94)				C-SYSTEM (POS94)	00	00-9C	00							
15F	ANT-BOOSTER (POS95)			S-SYSTEM (POS95)				C-SYSTEM (POS95)	00	00-9C	00							
160	ANT-BOOSTER (POS96)			S-SYSTEM (POS96)				C-SYSTEM (POS96)	00	00-9C	00							
161	ANT-BOOSTER (POS97)			S-SYSTEM (POS97)				C-SYSTEM (POS97)	00	00-9C	00							
162	ANT-BOOSTER (POS98)			S-SYSTEM (POS98)				C-SYSTEM (POS98)	00	00-9C	00							
163	ANT-BOOSTER (POS99)			S-SYSTEM (POS99)				C-SYSTEM (POS99)	00	00-9C	00							
164				C-SYSTEM (AV2)				C-SYSTEM (AV1)	00	00-44	00							
165				SLV1 (HIGH)					00	00-FF	00							
166				SLV1 (LOW)					00	00-FF	00							
167				SLV2 (HIGH)					00	00-FF	00							
168				SLV2 (LOW)					00	00-FF	00							
169				SLV3 (HIGH)					00	00-FF	00							
16A				SLV3 (LOW)					00	00-FF	00							
16B				SLV4 (HIGH)					00	00-FF	00							
16C				SLV4 (LOW)					00	00-FF	00							
16D				SLV5 (HIGH)					00	00-FF	00							
16E				SLV5 (LOW)					00	00-FF	00							
16F				SLV6 (HIGH)					00	00-FF	00							
170				SLV6 (LOW)					00	00-FF	00							
171				SLV7 (HIGH)					00	00-FF	00							
172				SLV7 (LOW)					00	00-FF	00							
173								TV/AV	00	00-1A(AV1), 2(AV2)	00							
174				LAST CHANNEL POSITION					01	00-F9	0C							
175				FLASH BACK POSITION					01	00-FF	01							
176				ROM CORRECTION-1 ID						00-FF	FF					Valid (A0)		
177				ROM CORRECTION-1 HIGH BYTE ADDRESS						00-FF	FF							
178				ROM CORRECTION-1 LOW BYTE ADDRESS						00-FF	FF							
179				ROM CORRECTION-1 DATA LENGTH						00-FF	FF							
17A				ROM CORRECTION-1 CHECKSUM						00-FF	FF							
17B				ROM CORRECTION-2 ID						00-FF	FF					Valid (A0)		
17C				ROM CORRECTION-2 HIGH BYTE ADDRESS						00-FF	FF							
17D				ROM CORRECTION-2 LOW BYTE ADDRESS						00-FF	FF							
17E				ROM CORRECTION-2 DATA LENGTH						00-FF	FF							
17F				ROM CORRECTION-2 CHECKSUM						00-FF	FF							
MODEL										MODEL								
MTV NO.																		
LETTER NO.										LETTER NO.								

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 7										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
										MANAGER			MANAGER			MANAGER			MANAGER		
										CHIEF			CHIEF			CHIEF			CHIEF		
										ENGINEER			ENGINEER			ENGINEER			ENGINEER		
										Tan											
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK				
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			SETTING DATA			
180	ROM CORRECTION-1 CODE									00-FF	FF										
181	ROM CORRECTION-1 CODE									00-FF	FF										
182	ROM CORRECTION-1 CODE									00-FF	FF										
183	ROM CORRECTION-1 CODE									00-FF	FF										
184	ROM CORRECTION-1 CODE									00-FF	FF										
185	ROM CORRECTION-1 CODE									00-FF	FF										
186	ROM CORRECTION-1 CODE									00-FF	FF										
187	ROM CORRECTION-1 CODE									00-FF	FF										
188	ROM CORRECTION-1 CODE									00-FF	FF										
189	ROM CORRECTION-1 CODE									00-FF	FF										
18A	ROM CORRECTION-1 CODE									00-FF	FF										
18B	ROM CORRECTION-1 CODE									00-FF	FF										
18C	ROM CORRECTION-1 CODE									00-FF	FF										
18D	ROM CORRECTION-1 CODE									00-FF	FF										
18E	ROM CORRECTION-1 CODE									00-FF	FF										
18F	ROM CORRECTION-1 CODE									00-FF	FF										
190	ROM CORRECTION-1 CODE									00-FF	FF										
191	ROM CORRECTION-1 CODE									00-FF	FF										
192	ROM CORRECTION-1 CODE									00-FF	FF										
193	ROM CORRECTION-1 CODE									00-FF	FF										
194	ROM CORRECTION-1 CODE									00-FF	FF										
195	ROM CORRECTION-1 CODE									00-FF	FF										
196	ROM CORRECTION-1 CODE									00-FF	FF										
197	ROM CORRECTION-1 CODE									00-FF	FF										
198	ROM CORRECTION-1 CODE									00-FF	FF										
199	ROM CORRECTION-1 CODE									00-FF	FF										
19A	ROM CORRECTION-1 CODE									00-FF	FF										
19B	ROM CORRECTION-1 CODE									00-FF	FF										
19C	ROM CORRECTION-1 CODE									00-FF	FF										
19D	ROM CORRECTION-1 CODE									00-FF	FF										
19E	ROM CORRECTION-1 CODE									00-FF	FF										
19F	ROM CORRECTION-1 CODE									00-FF	FF										
1A0	ROM CORRECTION-2 CODE									00-FF	FF										
1A1	ROM CORRECTION-2 CODE									00-FF	FF										
1A2	ROM CORRECTION-2 CODE									00-FF	FF										
1A3	ROM CORRECTION-2 CODE									00-FF	FF										
1A4	ROM CORRECTION-2 CODE									00-FF	FF										
1A5	ROM CORRECTION-2 CODE									00-FF	FF										
1A6	ROM CORRECTION-2 CODE									00-FF	FF										
1A7	ROM CORRECTION-2 CODE									00-FF	FF										
1A8	ROM CORRECTION-2 CODE									00-FF	FF										
1A9	ROM CORRECTION-2 CODE									00-FF	FF										
1AA	ROM CORRECTION-2 CODE									00-FF	FF										
1AB	ROM CORRECTION-2 CODE									00-FF	FF										
1AC	ROM CORRECTION-2 CODE									00-FF	FF										
1AD	ROM CORRECTION-2 CODE									00-FF	FF										
1AE	ROM CORRECTION-2 CODE									00-FF	FF										
1AF	ROM CORRECTION-2 CODE									00-FF	FF										
1B0	ROM CORRECTION-2 CODE									00-FF	FF										
1B1	ROM CORRECTION-2 CODE									00-FF	FF										
1B2	ROM CORRECTION-2 CODE									00-FF	FF										
1B3	ROM CORRECTION-2 CODE									00-FF	FF										
1B4	ROM CORRECTION-2 CODE									00-FF	FF										
1B5	ROM CORRECTION-2 CODE									00-FF	FF										
1B6	ROM CORRECTION-2 CODE									00-FF	FF										
1B7	ROM CORRECTION-2 CODE									00-FF	FF										
1B8	ROM CORRECTION-2 CODE									00-FF	FF										
1B9	ROM CORRECTION-2 CODE									00-FF	FF										
1BA	ROM CORRECTION-2 CODE									00-FF	FF										
1BB	ROM CORRECTION-2 CODE									00-FF	FF										
1BC	ROM CORRECTION-2 CODE									00-FF	FF										
1BD	ROM CORRECTION-2 CODE									00-FF	FF										
1BE	ROM CORRECTION-2 CODE									00-FF	FF										
1BF	ROM CORRECTION-2 CODE									00-FF	FF										
MODEL									MODEL												
LETTER NO.									LETTER NO.												

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 8									ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
									MANAGER			MANAGER			MANAGER			MATSUNAGA		
									CHIEF			CHIEF			CHIEF			ISMAL		
									ENGINEER Tan			ENGINEER			ENGINEER CHIN					
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																				
ADDRESS (HEX)	DATA							MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK				
	D7	D6	D5	D4	D3	D2	D1				D0	CHECK DATA	CHECK TYPE	CHECK DATA			CHECK TYPE	SETTING DATA		
1C0																				
1C1																				
1C2																				
1C3																				
1C4																				
1C5																				
1C6																				
1C7																				
1C8																				
1C9																				
1CA																				
1CB																				
1CC																				
1CD																				
1CE																				
1CF																				
1D0																				
1D1																				
1D2																				
1D3																				
1D4																				
1D5																				
1D6																				
1D7																				
1D8																				
1D9																				
1DA																				
1DB																				
1DC																				
1DD																				
1DE																				
1DF																				
1E0																				
1E1																				
1E2																				
1E3																				
1E4																				
1E5																				
1E6																				
1E7																				
1E8																				
1E9																				
1EA																				
1EB																				
1EC																				
1ED																				
1EE																				
1EF																				
1F0																				
1F1																				
1F2																				
1F3																				
1F4																				
1F5																				
1F6																				
1F7																				
1F8																				
1F9																				
1FA																				
1FB																				
1FC																				
1FD																				
1FE																				
1FF																				
MODEL									MODEL											
LETTER NO.									LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 9										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
										MANAGER				MANAGER				MANAGER		MATSUNAGA	
										CHIEF				CHIEF				CHIEF		ISMAIL	
								Tan		ENGINEER				ENGINEER		CHN					
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)	DATA								MOON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK				
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE						
200									3F	00-7F	3F										
201									3F	00-7F	3F										
202									7F	00-FF	7F										
203									7F	00-FF	7F										
204									7F	00-FF	7F										
205									32	00-7F	2A										
206									1F	00-3F	1F										
207									03	00-07	03										
208									64	00-7F	64										
209									3F	00-7F	47										
20A									7F	00-FF	7F										
20B									3F	00-7F	3D										
20C									2B	00-3F	26										
20D									5A	00-7F	5A										
20E									3F	00-7F	3F										
20F									26	00-3F	27										
210									03	00-07	02										
211									09	00-1F	12										
212									25	00-3F	25										
213									16	00-3F	16										
214									3C	00-3C	3C										
215									1F	00-3E	23										
216									06	00-0E	05										
217									11	00-1E	11										
218									40	00-7F	40										
219									40	00-7F	40										
21A									40	00-7F	40										
21B									40	00-7F	40										
21C									40	00-7F	40										
21D																					
21E																					
21F																					
220																					
221																					
222									64	00-7F	64										
223									7F	00-FF	7F										
224									20	00-3F	2C										
225									0D	00-1A	04										
226									20	00-3F	24										
227									0D	00-1A	10										
228									2B	00-3F	26										
229																					
22A																					
22B																					
22C									5F	00-7F	5F										
22D									04	00-07	07										
22E									05	00-07	05										
22F									05	00-07	05										
230									07	00-07	07										
231									05	00-07	05										
232									05	00-07	05										
233									06	00-07	06										
234									06	00-07	06										
235									07	00-07	07										
236									06	00-07	06										
237									06	00-07	05										
238									06	00-07	06										
239									29	00-3E	23										
23A									1F	00-3E	28										
23B									28	00-3E	28										
23C									17	00-3E	17										
23D									18	00-3E	27										
23E									1F	00-3E	20										
23F									24	00-3E	20										
MODEL																					
LETTER NO																					

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 10										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
										MANAGER				MANAGER				MANAGER			
										CHIEF				CHIEF				CHIEF		MATSUNAGA ISMAIL	
										ENGINEER		Tan		ENGINEER				ENGINEER		CHIN	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)		DATA							MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL		REMARK			
		D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	BETTING DATA				
240						SHARPNES-PR-EYUV (F31)				1A	00-3E	1A									
241						SHARPNES-PR-PAL (F32)				15	00-3E	26									
242						SHARPNES-PR-SECAM (F33)				10	00-3E	21									
243						SHARPNES-PR-N443 (F34)				15	00-3E	26									
244						SHARPNES-PR-N358 (F35)				15	00-3E	26									
245						TINT-AV (F42)				3F	00-7E	40									
246						TINT-ADJ (F43)				3F	00-7E	41									
247						TINT-YUV-ADJ (F44)				3F	00-7E	3F									
248						R-R DRIVE (F45)				47	00-7E	3F									
249						B-R DRIVE (F46)				35	00-7E	36									
24A						R-B DRIVE (F47)				3C	00-7E	39									
24B						B-B DRIVE (F48)				4C	00-7E	47									
24C										TRAP (F49)	02	00-03	02								
24D										TRAP-PAL (F50)	02	00-03	02								
24E										TRAP-SECAM (F51)	02	00-03	02								
24F										TRAP-N443 (F52)	02	00-03	02								
250										TRAP-N358 (F53)	02	00-03	02								
251										GAMMA (F58)	00	00-03	01								
252						BS-DIC (F59)				0A	00-0F	0A									
253										SL-TV (F62)	02	00-07	02								
254										SL-AV (F63)	04	00-07	02								
255										SL-YUV (F64)	04	00-07	04								
256										AS/FBP-TV (F65)	02	00-03	03								
257										AS/FBP-AV (F66)	02	00-03	03								
258										AS/FBP-YUV (F67)	02	00-03	03								
259										VDL (F68)	00	00-03	00								
25A										UDL (F69)	00	00-03	00								
25B										AUTO-SCM-KIL-TV (F70)	01	00-03	01								
25C										SECAM-BGP (F71)	00	00-03	00								
25D																					
25E																					
25F						OSD-POS (F75)				09	00-7F	09									
260						SHARPNES-OVER-AV (F36)				24	00-3E	20									
261						SHARPNES-OVER-YUV (F37)				24	00-3E	24									
262						SHARPNES-OVER-PAL (F38)				1F	00-3E	26									
263						SHARPNES-OVER-SECAM (F39)				1A	00-3E	21									
264						SHARPNES-OVER-N443 (F40)				1F	00-3E	26									
265						SHARPNES-OVER-N358 (F41)				1F	00-3E	26									
266										AFC2 GAIN (F57)	00	00-03	00								
267																					
268																					
269																					
26A																					
26B																					
26C																					
26D										AUTO-SCM-KIL-AV-YUV (F78)	01	00-03	01								
26E										AFC1-GAIN-TV (F79)	00	00-03	00								
26F										AFC1-GAIN-AV (F80)	03	00-03	03								
270										AFC1-GAIN-YUV (F81)	03	00-03	03								
271										OSD LEVEL (F82)	03	00-04	04								
272						AC-FAIL-WO-BRIGHT (F87)				FF	00-FF	FF									
273										FORCED-SCM-KIL-TV (F88)	02	00-03	02								
274										FORCED-SCM-KIL-AV-YUV (F89)	02	00-03	02								
275						VIDEO-DEMUTE-DELAY (F91)				00	00-FF	19									
276						SOUND-DEMUTE-DELAY (F92)				00	00-FF	28									
277						MER (F93)				46	00-FF	46									
278						MEL1 (F94)				96	00-FF	96									
279						MEL2 (F95)				9C	00-FF	9C									
27A						MEL3 (F96)				A3	00-FF	A3									
27B						MEL4 (F97)				A5	00-FF	A5									
27C						MEL5 (F98)				AA	00-FF	AA									
27D						MEL6 (F99)				B4	01-FF	B4									
27E						S-Start Point (F100)				15	00-3C	15									
27F						S-Stop Point (F101)				3C	00-3C	3C									
MODEL										MODEL											

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MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP		TV DESIGN ENGINEERING		TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 12										ISSUED DATE : 1 MARCH 2007		ISSUED DATE :		ISSUED DATE : 28.JUNE.2007					
										MANAGER		MANAGER		MANAGER					
										CHIEF		CHIEF		CHIEF					
										ENGINEER		Tan		ENGINEER		ENGINEER		CHIN	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																			
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INTAL		REMARK	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA			
2C0				TREBLE NEWS (F159)					00	00-14	00								
2C1				TREBLE MUSIC (F160)					0A	00-14	0A								
2C2				TREBLE MOVIE (F161)					0F	00-14	0F								
2C3				BASS NEWS (F162)					05	00-14	05								
2C4				BASS MUSIC (F163)					0A	00-14	0A								
2C5				BASS MOVIE (F164)					14	00-14	14								
2C6					NEWS	MUSIC	MOVIE	03	00-07	03									
2C7					VD3/VD2/VD1-TV (F174)			01	00-07	01									
2C8					VD3/VD2/VD1-AV (F175)			03	00-07	03									
2C9					VD3/VD2/VD1-YUV (F176)			03	00-07	03									
2CA					SL-TV (WEAK) (F177)			07	00-07	07									
2CB		VIF-AGC THRESHOLD (F178)							7F	00-7F	7F								
2CC							AFT OFFSET (F179)	00	00-04	01									
2CD		VOL-start (F180)							00	00-3C	00								
2CE		VOL-step (F181)							00	00-3C	00								
2CF						BASS-LIMIT1 (F182)		07	00-07	07									
2D0						BASS-LIMIT2 (F183)		07	00-07	07									
2D1						BASS-LIMIT3 (F184)		07	00-07	07									
2D2						BASS-LIMIT4 (F185)		07	00-07	07									
2D3																			
2D4																			
2D5																			
2D6																			
2D7																			
2D8																			
2D9																			
2DA																			
2DB																			
2DC																			
2DD																			
2DE																			
2DF																			
2E0																			
2E1																			
2E2																			
2E3																			
2E4																			
2E5																			
2E6																			
2E7																			
2E8																			
2E9																			
2EA																			
2EB																			
2EC																			
2ED																			
2EE																			
2EF																			
2F0																			
2F1																			
2F2																			
2F3																			
2F4																			
2F5																			
2F6																			
2F7																			
2F8																			
2F9																			
2FA																			
2FB																			
2FC																			
2FD																			
2FE																			
2FF																			
MODEL										MODEL									
LETTER NO.										LETTER NO.									

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1								SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 13								ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
								MANAGER			MANAGER			MANAGER			MATSUNAGA		
								CHIEF			CHIEF			CHIEF			ISMAIL		
								ENGINEER			ENGINEER			ENGINEER			CHIN		
								Tan											
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																			
ADDRESS (HEX)	DATA							MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK			
	D7	D6	D5	D4	D3	D2	D1				D0	CHECK DATA	CHECK TYPE	CHECK DATA			CHECK TYPE		
300																			
301																			
302																			
303																			
304																			
305																			
306																			
307																			
308																			
309																			
30A																			
30B																			
30C																			
30D																			
30E																			
30F																			
310																			
311																			
312																			
313																			
314																			
315																			
316																			
317																			
318																			
319																			
31A																			
31B																			
31C																			
31D																			
31E																			
31F																			
320																			
321																			
322																			
323																			
324																			
325																			
326																			
327																			
328																			
329																			
32A																			
32B																			
32C																			
32D																			
32E																			
32F																			
330																			
331																			
332																			
333																			
334																			
335																			
336																			
337																			
338																			
339																			
33A																			
33B																			
33C																			
33D																			
33E																			
33F																			
MODEL								MODEL											
LETTER NO.								LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_XC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 14										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28.JUNE.2007					
										MANAGER			MANAGER			MANAGER					
										CHIEF			CHIEF			CHIEF					
										ENGINEER			Tan			ENGINEER			ENGINEER		
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INTAL					
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			SETTING DATA			
340									3C	00-3C	3C						Used for Picture and Sound user setting storage when service option AV MODE (032) = 0				
341									28	00-3C	28										
342									1E	00-3C	1E										
343									1E	00-3C	1E										
344									23	00-3C	23										
345									02	00-04	02										
346									00	00-02	00										
347									0F	00-14	0F										
348									14	00-14	14										
349									1E	00-3C	1E										
34A									32	00-3C	32										
34B									1E	00-3C	1E										
34C									1E	00-3C	1E										
34D									1E	00-3C	1E										
34E									1E	00-3C	1E										
34F									02	00-04	02										
350									00	00-02	00										
351									0A	00-14	0A										
352									0A	00-14	0A										
353																					
354									1E	00-3C	1E										
355									1E	00-3C	1E										
356									1E	00-3C	1E										
357									1E	00-3C	1E										
358									14	00-3C	14										
359									02	00-04	02										
35A									00	00-02	00										
35B									00	00-14	00										
35C									05	00-14	05										
35D									01	00-07	01										
35E									03	00-03	03										
35F																					
360																					
361																					
362																					
363																					
364																					
365																					
366																					
367																					
368																					
369																					
36A																					
36B																					
36C																					
36D																					
36E																					
36F																					
370																					
371																					
372																					
373																					
374																					
375																					
376																					
377																					
378																					
379																					
37A																					
37B																					
37C																					
37D																					
37E																					
37F																					
MODEL										MODEL											
LETTER NO.										LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 15									ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
									MANAGER			MANAGER			MANAGER			MATSUNAGA		
									CHIEF			CHIEF			CHIEF			ISMAL		
									ENGINEER Tan			ENGINEER			ENGINEER CHIN					
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																				
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK			
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			SETTING DATA		
380																				
381																				
382																				
383																				
384																				
385																				
386																				
387																				
388																				
389																				
38A																				
38B																				
38C																				
38D																				
38E																				
38F																				
390																				
391																				
392																				
393																				
394																				
395																				
396																				
397																				
398																				
399																				
39A																				
39B																				
39C																				
39D																				
39E																				
39F																				
3A0																				
3A1																				
3A2																				
3A3																				
3A4																				
3A5																				
3A6																				
3A7																				
3A8																				
3A9																				
3AA																				
3AB																				
3AC																				
3AD																				
3AE																				
3AF																				
3B0																				
3B1																				
3B2																				
3B3																				
3B4																				
3B5																				
3B6																				
3B7																				
3B8																				
3B9																				
3BA																				
3BB																				
3BC																				
3BD																				
3BE																				
3BF																				
MODEL									MODEL											
LETTER NO.									LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_XC129WJN1										SEM PCD SOFTWARE GROUP		TV DESIGN ENGINEERING		TV PRODUCTION ENGINEERING			
EEPROM CHECK DATA LIST 16										ISSUED DATE : 1 MARCH 2007		ISSUED DATE :		ISSUED DATE : 28 JUNE 2007			
										MANAGER		MANAGER		MANAGER			
										CHIEF		CHIEF		CHIEF			
										ENGINEER		ENGINEER		ENGINEER			
										Tsn				CHIN			
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																	
ADDRESS	DATA								MICRON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL	
(HEX)	D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK
3C0																	
3C1																	
3C2																	
3C3																	
3C4																	
3C5																	
3C6																	
3C7																	
3C8																	
3C9																	
3CA																	
3CB																	
3CC																	
3CD																	
3CE																	
3CF																	
3D0																	
3D1																	
3D2																	
3D3																	
3D4																	
3D5																	
3D6																	
3D7																	
3D8																	
3D9																	
3DA																	
3DB																	
3DC																	
3DD																	
3DE																	
3DF																	
3E0																	
3E1																	
3E2																	
3E3																	
3E4																	
3E5																	
3E6																	
3E7																	
3E8																	
3E9																	
3EA																	
3EB																	
3EC																	
3ED																	
3EE																	
3EF																	
3F0																	
3F1																	
3F2																	
3F3																	
3F4																	
3F5																	
3F6																	
3F7																	
3F8																	
3F9																	
3FA																	
3FB																	
3FC																	
3FD																	
3FE																	
3FF																	
MODEL										MODEL							
LETTER NO.										LETTER NO.							

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING		
EEPROM CHECK DATA LIST 17										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28.JUNE.2007		
										MANAGER			MANAGER			MANAGER		
										CHIEF			CHIEF			CHIEF		
										ENGINEER			ENGINEER			ENGINEER		
										T30								
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																		
ADDRESS (HEX)	D7	D6	D5	D4	D3	D2	D1	D0	MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS CHECK DATA		CTV FINAL CHECK DATA		LAST INITIAL BETTING DATA		REMARK
400										00-FF								POS 100
401										00-FF								
402										00-FF								POS 101
403										00-FF								
404										00-FF								POS 102
405										00-FF								
406										00-FF								POS 103
407										00-FF								
408										00-FF								POS 104
409										00-FF								
40A										00-FF								POS 105
40B										00-FF								
40C										00-FF								POS 106
40D										00-FF								
40E										00-FF								POS 107
40F										00-FF								
410										00-FF								POS 108
411										00-FF								
412										00-FF								POS 109
413										00-FF								
414										00-FF								POS 110
415										00-FF								
416										00-FF								POS 111
417										00-FF								
418										00-FF								POS 112
419										00-FF								
41A										00-FF								POS 113
41B										00-FF								
41C										00-FF								POS 114
41D										00-FF								
41E										00-FF								POS 115
41F										00-FF								
420										00-FF								POS 116
421										00-FF								
422										00-FF								POS 117
423										00-FF								
424										00-FF								POS 118
425										00-FF								
426										00-FF								POS 119
427										00-FF								
428										00-FF								POS 120
429										00-FF								
42A										00-FF								POS 121
42B										00-FF								
42C										00-FF								POS 122
42D										00-FF								
42E										00-FF								POS 123
42F										00-FF								
430										00-FF								POS 124
431										00-FF								
432										00-FF								POS 125
433										00-FF								
434										00-FF								POS 126
435										00-FF								
436										00-FF								POS 127
437										00-FF								
438										00-FF								POS 128
439										00-FF								
43A										00-FF								POS 129
43B										00-FF								
43C										00-FF								POS 130
43D										00-FF								
43E										00-FF								POS 131
43F										00-FF								
MODEL										MODEL								
LETTER NO.										LETTER NO.								

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING				
EEPROM CHECK DATA LIST 18										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007				
										MANAGER			MANAGER			MANAGER			MATSUNAGA	
										CHIEF			CHIEF			CHIEF			ISMAIL	
		ENGINEER				Tan		ENGINEER					ENGINEER		CHIN					
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																				
ADDRESS (HEX)	DATA								MCON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK			
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			SETTING DATA		
440	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 132			
441	TUNING FREQUENCY (HIGH BYTE)									00-FF										
442	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 133			
443	TUNING FREQUENCY (HIGH BYTE)									00-FF										
444	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 134			
445	TUNING FREQUENCY (HIGH BYTE)									00-FF										
446	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 135			
447	TUNING FREQUENCY (HIGH BYTE)									00-FF										
448	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 136			
449	TUNING FREQUENCY (HIGH BYTE)									00-FF										
44A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 137			
44B	TUNING FREQUENCY (HIGH BYTE)									00-FF										
44C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 138			
44D	TUNING FREQUENCY (HIGH BYTE)									00-FF										
44E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 139			
44F	TUNING FREQUENCY (HIGH BYTE)									00-FF										
450	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 140			
451	TUNING FREQUENCY (HIGH BYTE)									00-FF										
452	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 141			
453	TUNING FREQUENCY (HIGH BYTE)									00-FF										
454	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 142			
455	TUNING FREQUENCY (HIGH BYTE)									00-FF										
456	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 143			
457	TUNING FREQUENCY (HIGH BYTE)									00-FF										
458	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 144			
459	TUNING FREQUENCY (HIGH BYTE)									00-FF										
45A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 145			
45B	TUNING FREQUENCY (HIGH BYTE)									00-FF										
45C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 146			
45D	TUNING FREQUENCY (HIGH BYTE)									00-FF										
45E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 147			
45F	TUNING FREQUENCY (HIGH BYTE)									00-FF										
460	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 148			
461	TUNING FREQUENCY (HIGH BYTE)									00-FF										
462	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 149			
463	TUNING FREQUENCY (HIGH BYTE)									00-FF										
464	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 150			
465	TUNING FREQUENCY (HIGH BYTE)									00-FF										
466	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 151			
467	TUNING FREQUENCY (HIGH BYTE)									00-FF										
468	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 152			
469	TUNING FREQUENCY (HIGH BYTE)									00-FF										
46A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 153			
46B	TUNING FREQUENCY (HIGH BYTE)									00-FF										
46C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 154			
46D	TUNING FREQUENCY (HIGH BYTE)									00-FF										
46E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 155			
46F	TUNING FREQUENCY (HIGH BYTE)									00-FF										
470	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 156			
471	TUNING FREQUENCY (HIGH BYTE)									00-FF										
472	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 157			
473	TUNING FREQUENCY (HIGH BYTE)									00-FF										
474	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 158			
475	TUNING FREQUENCY (HIGH BYTE)									00-FF										
476	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 159			
477	TUNING FREQUENCY (HIGH BYTE)									00-FF										
478	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 160			
479	TUNING FREQUENCY (HIGH BYTE)									00-FF										
47A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 161			
47B	TUNING FREQUENCY (HIGH BYTE)									00-FF										
47C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 162			
47D	TUNING FREQUENCY (HIGH BYTE)									00-FF										
47E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 163			
47F	TUNING FREQUENCY (HIGH BYTE)									00-FF										
MODEL										MODEL										
LETTER NO.										LETTER NO.										

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING								
EEPROM CHECK DATA LIST 19										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007								
										MANAGER			MANAGER			MANAGER			MATSUNAGA					
										CHIEF			CHIEF			CHIEF			ISMAIL					
										ENGINEER			T&O			ENGINEER			ENGINEER			CHIN		
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																								
ADDRESS (HEX)		DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK						
		D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE								
480	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 164							
481	TUNING FREQUENCY (HIGH BYTE)									00-FF														
482	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 165							
483	TUNING FREQUENCY (HIGH BYTE)									00-FF														
484	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 166							
485	TUNING FREQUENCY (HIGH BYTE)									00-FF														
486	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 167							
487	TUNING FREQUENCY (HIGH BYTE)									00-FF														
488	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 168							
489	TUNING FREQUENCY (HIGH BYTE)									00-FF														
48A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 169							
48B	TUNING FREQUENCY (HIGH BYTE)									00-FF														
48C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 170							
48D	TUNING FREQUENCY (HIGH BYTE)									00-FF														
48E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 171							
48F	TUNING FREQUENCY (HIGH BYTE)									00-FF														
490	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 172							
491	TUNING FREQUENCY (HIGH BYTE)									00-FF														
492	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 173							
493	TUNING FREQUENCY (HIGH BYTE)									00-FF														
494	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 174							
495	TUNING FREQUENCY (HIGH BYTE)									00-FF														
496	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 175							
497	TUNING FREQUENCY (HIGH BYTE)									00-FF														
498	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 176							
499	TUNING FREQUENCY (HIGH BYTE)									00-FF														
49A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 177							
49B	TUNING FREQUENCY (HIGH BYTE)									00-FF														
49C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 178							
49D	TUNING FREQUENCY (HIGH BYTE)									00-FF														
49E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 179							
49F	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4A0	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 180							
4A1	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4A2	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 181							
4A3	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4A4	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 182							
4A5	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4A6	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 183							
4A7	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4A8	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 184							
4A9	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4AA	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 185							
4AB	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4AC	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 186							
4AD	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4AE	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 187							
4AF	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4B0	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 188							
4B1	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4B2	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 189							
4B3	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4B4	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 190							
4B5	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4B6	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 191							
4B7	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4B8	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 192							
4B9	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4BA	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 193							
4BB	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4BC	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 194							
4BD	TUNING FREQUENCY (HIGH BYTE)									00-FF														
4BE	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 195							
4BF	TUNING FREQUENCY (HIGH BYTE)									00-FF														
MODEL										MODEL														
LETTER NO.										LETTER NO.														

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 20										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007					
										MANAGER			MANAGER			MANAGER			MATSUNAGA		
										CHIEF			CHIEF			CHIEF			ISMAIL		
										ENGINEER		TBN		ENGINEER			ENGINEER			CHIN	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)		DATA							MCON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL	REMARK				
		D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		SETTING DATA			
4C0		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 196		
4C1		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4C2		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 197		
4C3		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4C4		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 198		
4C5		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4C6		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 199		
4C7		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4C8		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 200		
4C9		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4CA		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 201		
4CB		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4CC		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 202		
4CD		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4CE		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 203		
4CF		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4D0		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 204		
4D1		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4D2		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 205		
4D3		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4D4		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 206		
4D5		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4D6		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 207		
4D7		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4D8		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 208		
4D9		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4DA		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 209		
4DB		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4DC		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 210		
4DD		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4DE		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 211		
4DF		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4E0		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 212		
4E1		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4E2		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 213		
4E3		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4E4		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 214		
4E5		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4E6		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 215		
4E7		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4E8		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 216		
4E9		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4EA		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 217		
4EB		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4EC		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 218		
4ED		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4EE		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 219		
4EF		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4F0		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 220		
4F1		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4F2		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 221		
4F3		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4F4		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 222		
4F5		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4F6		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 223		
4F7		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4F8		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 224		
4F9		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4FA		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 225		
4FB		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4FC		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 226		
4FD		TUNING FREQUENCY (HIGH BYTE)								00-FF											
4FE		TUNING FREQUENCY (LOW BYTE)								00-FF									POS 227		
4FF		TUNING FREQUENCY (HIGH BYTE)								00-FF											
MODEL										MODEL											
LETTER NO										LETTER NO											

MEMORY MAP (Continued)

MODEL : GA-7 _IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 21										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28.JUNE.2007					
										MANAGER			MANAGER			MANAGER			MATSUNAGA		
										CHIEF			CHIEF			CHIEF			ISMAIL		
										ENGINEER		TAN		ENGINEER			ENGINEER			CHIN	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																					
ADDRESS (HEX)		DATA								MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL				
		D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK			
500		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 228		
501		TUNING FREQUENCY (HIGH BYTE)									00-FF										
502		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 229		
503		TUNING FREQUENCY (HIGH BYTE)									00-FF										
504		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 230		
505		TUNING FREQUENCY (HIGH BYTE)									00-FF										
506		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 231		
507		TUNING FREQUENCY (HIGH BYTE)									00-FF										
508		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 232		
509		TUNING FREQUENCY (HIGH BYTE)									00-FF										
50A		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 233		
50B		TUNING FREQUENCY (HIGH BYTE)									00-FF										
50C		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 234		
50D		TUNING FREQUENCY (HIGH BYTE)									00-FF										
50E		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 235		
50F		TUNING FREQUENCY (HIGH BYTE)									00-FF										
510		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 236		
511		TUNING FREQUENCY (HIGH BYTE)									00-FF										
512		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 237		
513		TUNING FREQUENCY (HIGH BYTE)									00-FF										
514		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 238		
515		TUNING FREQUENCY (HIGH BYTE)									00-FF										
516		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 239		
517		TUNING FREQUENCY (HIGH BYTE)									00-FF										
518		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 240		
519		TUNING FREQUENCY (HIGH BYTE)									00-FF										
51A		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 241		
51B		TUNING FREQUENCY (HIGH BYTE)									00-FF										
51C		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 242		
51D		TUNING FREQUENCY (HIGH BYTE)									00-FF										
51E		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 243		
51F		TUNING FREQUENCY (HIGH BYTE)									00-FF										
520		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 244		
521		TUNING FREQUENCY (HIGH BYTE)									00-FF										
522		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 245		
523		TUNING FREQUENCY (HIGH BYTE)									00-FF										
524		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 246		
525		TUNING FREQUENCY (HIGH BYTE)									00-FF										
526		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 247		
527		TUNING FREQUENCY (HIGH BYTE)									00-FF										
528		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 248		
529		TUNING FREQUENCY (HIGH BYTE)									00-FF										
52A		TUNING FREQUENCY (LOW BYTE)									00-FF								POS 249		
52B		TUNING FREQUENCY (HIGH BYTE)									00-FF										
52C																					
52D																					
52E																					
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MODEL										MODEL											
LETTER NO.										LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING		
EEPROM CHECK DATA LIST 22										ISSUED DATE : 1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28 JUNE 2007		
										MANAGER			MANAGER			MANAGER		MATSUNAGA
										CHIEF			CHIEF			CHIEF		ISMAIL
										ENGINEER		Tan	ENGINEER			ENGINEER		CHIN
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																		
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			
540	ANT-BOOSTER (POS100)		S-SYSTEM (POS100)			C-SYSTEM (POS100)		00	00-9C	00							S-SYSTEM	
541	ANT-BOOSTER (POS101)		S-SYSTEM (POS101)			C-SYSTEM (POS101)		00	00-9C	00							1: I	
542	ANT-BOOSTER (POS102)		S-SYSTEM (POS102)			C-SYSTEM (POS102)		00	00-9C	00							2: B/G	
543	ANT-BOOSTER (POS103)		S-SYSTEM (POS103)			C-SYSTEM (POS103)		00	00-9C	00							1: I	
544	ANT-BOOSTER (POS104)		S-SYSTEM (POS104)			C-SYSTEM (POS104)		00	00-9C	00							2: D/K	
545	ANT-BOOSTER (POS105)		S-SYSTEM (POS105)			C-SYSTEM (POS105)		00	00-9C	00							3: M	
546	ANT-BOOSTER (POS106)		S-SYSTEM (POS106)			C-SYSTEM (POS106)		00	00-9C	00								
547	ANT-BOOSTER (POS107)		S-SYSTEM (POS107)			C-SYSTEM (POS107)		00	00-9C	00							C-SYSTEM	
548	ANT-BOOSTER (POS108)		S-SYSTEM (POS108)			C-SYSTEM (POS108)		00	00-9C	00							2: AUTO	
549	ANT-BOOSTER (POS109)		S-SYSTEM (POS109)			C-SYSTEM (POS109)		00	00-9C	00							1: PAL	
54A	ANT-BOOSTER (POS110)		S-SYSTEM (POS110)			C-SYSTEM (POS110)		00	00-9C	00							2: SECAM	
54B	ANT-BOOSTER (POS111)		S-SYSTEM (POS111)			C-SYSTEM (POS111)		00	00-9C	00							3: N443	
54C	ANT-BOOSTER (POS112)		S-SYSTEM (POS112)			C-SYSTEM (POS112)		00	00-9C	00							4: N358	
54D	ANT-BOOSTER (POS113)		S-SYSTEM (POS113)			C-SYSTEM (POS113)		00	00-9C	00								
54E	ANT-BOOSTER (POS114)		S-SYSTEM (POS114)			C-SYSTEM (POS114)		00	00-9C	00							ANT-BOOSTER	
54F	ANT-BOOSTER (POS115)		S-SYSTEM (POS115)			C-SYSTEM (POS115)		00	00-9C	00							3: OFF	
550	ANT-BOOSTER (POS116)		S-SYSTEM (POS116)			C-SYSTEM (POS116)		00	00-9C	00							1: ON I	
551	ANT-BOOSTER (POS117)		S-SYSTEM (POS117)			C-SYSTEM (POS117)		00	00-9C	00							2: ON II	
552	ANT-BOOSTER (POS118)		S-SYSTEM (POS118)			C-SYSTEM (POS118)		00	00-9C	00								
553	ANT-BOOSTER (POS119)		S-SYSTEM (POS119)			C-SYSTEM (POS119)		00	00-9C	00								
554	ANT-BOOSTER (POS120)		S-SYSTEM (POS120)			C-SYSTEM (POS120)		00	00-9C	00								
555	ANT-BOOSTER (POS121)		S-SYSTEM (POS121)			C-SYSTEM (POS121)		00	00-9C	00								
556	ANT-BOOSTER (POS122)		S-SYSTEM (POS122)			C-SYSTEM (POS122)		00	00-9C	00								
557	ANT-BOOSTER (POS123)		S-SYSTEM (POS123)			C-SYSTEM (POS123)		00	00-9C	00								
558	ANT-BOOSTER (POS124)		S-SYSTEM (POS124)			C-SYSTEM (POS124)		00	00-9C	00								
559	ANT-BOOSTER (POS125)		S-SYSTEM (POS125)			C-SYSTEM (POS125)		00	00-9C	00								
55A	ANT-BOOSTER (POS126)		S-SYSTEM (POS126)			C-SYSTEM (POS126)		00	00-9C	00								
55B	ANT-BOOSTER (POS127)		S-SYSTEM (POS127)			C-SYSTEM (POS127)		00	00-9C	00								
55C	ANT-BOOSTER (POS128)		S-SYSTEM (POS128)			C-SYSTEM (POS128)		00	00-9C	00								
55D	ANT-BOOSTER (POS129)		S-SYSTEM (POS129)			C-SYSTEM (POS129)		00	00-9C	00								
55E	ANT-BOOSTER (POS130)		S-SYSTEM (POS130)			C-SYSTEM (POS130)		00	00-9C	00								
55F	ANT-BOOSTER (POS131)		S-SYSTEM (POS131)			C-SYSTEM (POS131)		00	00-9C	00								
560	ANT-BOOSTER (POS132)		S-SYSTEM (POS132)			C-SYSTEM (POS132)		00	00-9C	00								
561	ANT-BOOSTER (POS133)		S-SYSTEM (POS133)			C-SYSTEM (POS133)		00	00-9C	00								
562	ANT-BOOSTER (POS134)		S-SYSTEM (POS134)			C-SYSTEM (POS134)		00	00-9C	00								
563	ANT-BOOSTER (POS135)		S-SYSTEM (POS135)			C-SYSTEM (POS135)		00	00-9C	00								
564	ANT-BOOSTER (POS136)		S-SYSTEM (POS136)			C-SYSTEM (POS136)		00	00-9C	00								
565	ANT-BOOSTER (POS137)		S-SYSTEM (POS137)			C-SYSTEM (POS137)		00	00-9C	00								
566	ANT-BOOSTER (POS138)		S-SYSTEM (POS138)			C-SYSTEM (POS138)		00	00-9C	00								
567	ANT-BOOSTER (POS139)		S-SYSTEM (POS139)			C-SYSTEM (POS139)		00	00-9C	00								
568	ANT-BOOSTER (POS140)		S-SYSTEM (POS140)			C-SYSTEM (POS140)		00	00-9C	00								
569	ANT-BOOSTER (POS141)		S-SYSTEM (POS141)			C-SYSTEM (POS141)		00	00-9C	00								
56A	ANT-BOOSTER (POS142)		S-SYSTEM (POS142)			C-SYSTEM (POS142)		00	00-9C	00								
56B	ANT-BOOSTER (POS143)		S-SYSTEM (POS143)			C-SYSTEM (POS143)		00	00-9C	00								
56C	ANT-BOOSTER (POS144)		S-SYSTEM (POS144)			C-SYSTEM (POS144)		00	00-9C	00								
56D	ANT-BOOSTER (POS145)		S-SYSTEM (POS145)			C-SYSTEM (POS145)		00	00-9C	00								
56E	ANT-BOOSTER (POS146)		S-SYSTEM (POS146)			C-SYSTEM (POS146)		00	00-9C	00								
56F	ANT-BOOSTER (POS147)		S-SYSTEM (POS147)			C-SYSTEM (POS147)		00	00-9C	00								
570	ANT-BOOSTER (POS148)		S-SYSTEM (POS148)			C-SYSTEM (POS148)		00	00-9C	00								
571	ANT-BOOSTER (POS149)		S-SYSTEM (POS149)			C-SYSTEM (POS149)		00	00-9C	00								
572	ANT-BOOSTER (POS150)		S-SYSTEM (POS150)			C-SYSTEM (POS150)		00	00-9C	00								
573	ANT-BOOSTER (POS151)		S-SYSTEM (POS151)			C-SYSTEM (POS151)		00	00-9C	00								
574	ANT-BOOSTER (POS152)		S-SYSTEM (POS152)			C-SYSTEM (POS152)		00	00-9C	00								
575	ANT-BOOSTER (POS153)		S-SYSTEM (POS153)			C-SYSTEM (POS153)		00	00-9C	00								
576	ANT-BOOSTER (POS154)		S-SYSTEM (POS154)			C-SYSTEM (POS154)		00	00-9C	00								
577	ANT-BOOSTER (POS155)		S-SYSTEM (POS155)			C-SYSTEM (POS155)		00	00-9C	00								
578	ANT-BOOSTER (POS156)		S-SYSTEM (POS156)			C-SYSTEM (POS156)		00	00-9C	00								
579	ANT-BOOSTER (POS157)		S-SYSTEM (POS157)			C-SYSTEM (POS157)		00	00-9C	00								
57A	ANT-BOOSTER (POS158)		S-SYSTEM (POS158)			C-SYSTEM (POS158)		00	00-9C	00								
57B	ANT-BOOSTER (POS159)		S-SYSTEM (POS159)			C-SYSTEM (POS159)		00	00-9C	00								
57C	ANT-BOOSTER (POS160)		S-SYSTEM (POS160)			C-SYSTEM (POS160)		00	00-9C	00								
57D	ANT-BOOSTER (POS161)		S-SYSTEM (POS161)			C-SYSTEM (POS161)		00	00-9C	00								
57E	ANT-BOOSTER (POS162)		S-SYSTEM (POS162)			C-SYSTEM (POS162)		00	00-9C	00								
57F	ANT-BOOSTER (POS163)		S-SYSTEM (POS163)			C-SYSTEM (POS163)		00	00-9C	00								
MODEL																		
MODEL																		

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1										SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING				
EEPROM CHECK DATA LIST 23										ISSUED DATE : MARCH 2007			ISSUED DATE :			ISSUED DATE : 28.JUNE.2007				
										MANAGER			MANAGER			MANAGER			MATSUNAGA	
										CHIEF			CHIEF			CHIEF			ISMAIL	
										ENGINEER		Tan	ENGINEER			ENGINEER		CHIN		
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																				
ADDRESS (HEX)	DATA							MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INTAL	REMARK				
	D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		SETTING DATA			
580	ANT-BOOSTER (POS164)		S-SYSTEM (POS164)			C-SYSTEM (POS164)		00	00-9C	00										
581	ANT-BOOSTER (POS165)		S-SYSTEM (POS165)			C-SYSTEM (POS165)		00	00-9C	00						S-SYSTEM				
582	ANT-BOOSTER (POS166)		S-SYSTEM (POS166)			C-SYSTEM (POS166)		00	00-9C	00						S- BIG				
583	ANT-BOOSTER (POS167)		S-SYSTEM (POS167)			C-SYSTEM (POS167)		00	00-9C	00						1- I				
584	ANT-BOOSTER (POS168)		S-SYSTEM (POS168)			C-SYSTEM (POS168)		00	00-9C	00						2- DIK				
585	ANT-BOOSTER (POS169)		S-SYSTEM (POS169)			C-SYSTEM (POS169)		00	00-9C	00						3- M				
586	ANT-BOOSTER (POS170)		S-SYSTEM (POS170)			C-SYSTEM (POS170)		00	00-9C	00										
587	ANT-BOOSTER (POS171)		S-SYSTEM (POS171)			C-SYSTEM POS171)		00	00-9C	00						C-SYSTEM				
588	ANT-BOOSTER (POS172)		S-SYSTEM (POS172)			C-SYSTEM (POS172)		00	00-9C	00						S- AUTO				
589	ANT-BOOSTER (POS173)		S-SYSTEM (POS173)			C-SYSTEM (POS173)		00	00-9C	00						1- PAL				
58A	ANT-BOOSTER (POS174)		S-SYSTEM (POS174)			C-SYSTEM (POS174)		00	00-9C	00						2- SECAM				
58B	ANT-BOOSTER (POS175)		S-SYSTEM (POS175)			C-SYSTEM (POS175)		00	00-9C	00						3- N443				
58C	ANT-BOOSTER (POS176)		S-SYSTEM (POS176)			C-SYSTEM (POS176)		00	00-9C	00						4- N358				
58D	ANT-BOOSTER (POS177)		S-SYSTEM (POS177)			C-SYSTEM (POS177)		00	00-9C	00										
58E	ANT-BOOSTER (POS178)		S-SYSTEM (POS178)			C-SYSTEM (POS178)		00	00-9C	00						ANT-BOOSTER				
58F	ANT-BOOSTER (POS179)		S-SYSTEM (POS179)			C-SYSTEM (POS179)		00	00-9C	00						5- OFF				
590	ANT-BOOSTER (POS180)		S-SYSTEM (POS180)			C-SYSTEM (POS180)		00	00-9C	00						1- ON I				
591	ANT-BOOSTER (POS181)		S-SYSTEM (POS181)			C-SYSTEM (POS181)		00	00-9C	00						2- ON II				
592	ANT-BOOSTER (POS182)		S-SYSTEM (POS182)			C-SYSTEM (POS182)		00	00-9C	00										
593	ANT-BOOSTER (POS183)		S-SYSTEM (POS183)			C-SYSTEM (POS183)		00	00-9C	00										
594	ANT-BOOSTER (POS184)		S-SYSTEM (POS184)			C-SYSTEM (POS184)		00	00-9C	00										
595	ANT-BOOSTER (POS185)		S-SYSTEM (POS185)			C-SYSTEM (POS185)		00	00-9C	00										
596	ANT-BOOSTER (POS186)		S-SYSTEM (POS186)			C-SYSTEM (POS186)		00	00-9C	00										
597	ANT-BOOSTER (POS187)		S-SYSTEM (POS187)			C-SYSTEM (POS187)		00	00-9C	00										
598	ANT-BOOSTER (POS188)		S-SYSTEM (POS188)			C-SYSTEM (POS188)		00	00-9C	00										
599	ANT-BOOSTER (POS189)		S-SYSTEM (POS189)			C-SYSTEM (POS189)		00	00-9C	00										
59A	ANT-BOOSTER (POS190)		S-SYSTEM (POS190)			C-SYSTEM (POS190)		00	00-9C	00										
59B	ANT-BOOSTER (POS191)		S-SYSTEM (POS191)			C-SYSTEM (POS191)		00	00-9C	00										
59C	ANT-BOOSTER (POS192)		S-SYSTEM (POS192)			C-SYSTEM (POS192)		00	00-9C	00										
59D	ANT-BOOSTER (POS193)		S-SYSTEM (POS193)			C-SYSTEM (POS193)		00	00-9C	00										
59E	ANT-BOOSTER (POS194)		S-SYSTEM (POS194)			C-SYSTEM (POS194)		00	00-9C	00										
59F	ANT-BOOSTER (POS195)		S-SYSTEM (POS195)			C-SYSTEM (POS195)		00	00-9C	00										
5A0	ANT-BOOSTER (POS196)		S-SYSTEM (POS196)			C-SYSTEM (POS196)		00	00-9C	00										
5A1	ANT-BOOSTER (POS197)		S-SYSTEM (POS197)			C-SYSTEM (POS197)		00	00-9C	00										
5A2	ANT-BOOSTER (POS198)		S-SYSTEM (POS198)			C-SYSTEM (POS198)		00	00-9C	00										
5A3	ANT-BOOSTER (POS199)		S-SYSTEM (POS199)			C-SYSTEM (POS199)		00	00-9C	00										
5A4	ANT-BOOSTER (POS200)		S-SYSTEM (POS200)			C-SYSTEM (POS200)		00	00-9C	00										
5A5	ANT-BOOSTER (POS201)		S-SYSTEM (POS201)			C-SYSTEM (POS201)		00	00-9C	00										
5A6	ANT-BOOSTER (POS202)		S-SYSTEM (POS202)			C-SYSTEM (POS202)		00	00-9C	00										
5A7	ANT-BOOSTER (POS203)		S-SYSTEM (POS203)			C-SYSTEM (POS203)		00	00-9C	00										
5A8	ANT-BOOSTER (POS204)		S-SYSTEM (POS204)			C-SYSTEM (POS204)		00	00-9C	00										
5A9	ANT-BOOSTER (POS205)		S-SYSTEM (POS205)			C-SYSTEM (POS205)		00	00-9C	00										
5AA	ANT-BOOSTER (POS206)		S-SYSTEM (POS206)			C-SYSTEM (POS206)		00	00-9C	00										
5AB	ANT-BOOSTER (POS207)		S-SYSTEM (POS207)			C-SYSTEM (POS207)		00	00-9C	00										
5AC	ANT-BOOSTER (POS208)		S-SYSTEM (POS208)			C-SYSTEM (POS208)		00	00-9C	00										
5AD	ANT-BOOSTER (POS209)		S-SYSTEM (POS209)			C-SYSTEM (POS209)		00	00-9C	00										
5AE	ANT-BOOSTER (POS210)		S-SYSTEM (POS210)			C-SYSTEM (POS210)		00	00-9C	00										
5AF	ANT-BOOSTER (POS211)		S-SYSTEM (POS211)			C-SYSTEM (POS211)		00	00-9C	00										
5B0	ANT-BOOSTER (POS212)		S-SYSTEM (POS212)			C-SYSTEM (POS212)		00	00-9C	00										
5B1	ANT-BOOSTER (POS213)		S-SYSTEM (POS213)			C-SYSTEM (POS213)		00	00-9C	00										
5B2	ANT-BOOSTER (POS214)		S-SYSTEM (POS214)			C-SYSTEM (POS214)		00	00-9C	00										
5B3	ANT-BOOSTER (POS215)		S-SYSTEM (POS215)			C-SYSTEM (POS215)		00	00-9C	00										
5B4	ANT-BOOSTER (POS216)		S-SYSTEM (POS216)			C-SYSTEM (POS216)		00	00-9C	00										
5B5	ANT-BOOSTER (POS217)		S-SYSTEM (POS217)			C-SYSTEM (POS217)		00	00-9C	00										
5B6	ANT-BOOSTER (POS218)		S-SYSTEM (POS218)			C-SYSTEM (POS218)		00	00-9C	00										
5B7	ANT-BOOSTER (POS219)		S-SYSTEM (POS219)			C-SYSTEM (POS219)		00	00-9C	00										
5B8	ANT-BOOSTER (POS220)		S-SYSTEM (POS220)			C-SYSTEM (POS220)		00	00-9C	00										
5B9	ANT-BOOSTER (POS221)		S-SYSTEM (POS221)			C-SYSTEM (POS221)		00	00-9C	00										
5BA	ANT-BOOSTER (POS222)		S-SYSTEM (POS222)			C-SYSTEM (POS222)		00	00-9C	00										
5BB	ANT-BOOSTER (POS223)		S-SYSTEM (POS223)			C-SYSTEM (POS223)		00	00-9C	00										
5BC	ANT-BOOSTER (POS224)		S-SYSTEM (POS224)			C-SYSTEM (POS224)		00	00-9C	00										
5BD	ANT-BOOSTER (POS225)		S-SYSTEM (POS225)			C-SYSTEM (POS225)		00	00-9C	00										
5BE	ANT-BOOSTER (POS226)		S-SYSTEM (POS226)			C-SYSTEM (POS226)		00	00-9C	00										
5BF	ANT-BOOSTER (POS227)		S-SYSTEM (POS227)			C-SYSTEM (POS227)		00	00-9C	00										
MODEL										MODEL										
LETTER NO.										LETTER NO.										

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING			TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 25									ISSUED DATE :1 MARCH 2007			ISSUED DATE :			ISSUED DATE : 28.JUNE.2007					
									MANAGER				MANAGER				MANAGER		MATSUNAGA	
									CHIEF				CHIEF				CHIEF		ISMAL	
									ENGINEER		TAN		ENGINEER				ENGINEER		CHIN	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																				
ADDRESS (HEX)		DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INTIAL			
		D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK		
600																				
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MODEL									MODEL											
LETTER NO.									LETTER NO.											

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING				TV PRODUCTION ENGINEERING								
EEPROM CHECK DATA LIST 26									ISSUED DATE : 1 MARCH 2007			ISSUED DATE :				ISSUED DATE : 28 JUNE 2007								
									MANAGER						MANAGER						MANAGER			MATSUNAGA
									CHIEF						CHIEF						CHIEF			ISMAIL
									ENGINEER			Tan			ENGINEER						ENGINEER			CHIN
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																								
ADDRESS (HEX)	DATA								MCON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	REMARK							
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			SETTING DATA						
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LETTER NO.									LETTER NO.															

MEMORY MAP (Continued)

MODEL : GA-7 IXC129WJN1									SEM PCD SOFTWARE GROUP		TV DESIGN ENGINEERING		TV PRODUCTION ENGINEERING					
EEPROM CHECK DATA LIST 28									ISSUED DATE : 1 MARCH 2007		ISSUED DATE :		ISSUED DATE : 28 JUNE 2007					
									MANAGER		MANAGER		MANAGER					
									CHIEF		CHIEF		CHIEF					
									ENGINEER		ENGINEER		ENGINEER					
									T80									
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																		
ADDRESS (HEX)	D7	D6	D5	D4	D3	D2	D1	D0	MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS CHECK DATA CHECK TYPE		CTV FINAL CHECK DATA CHECK TYPE		LAST INITIAL SETTING DATA		REMARK
6C0																		
6C1																		
6C2																		
6C3																		
6C4																		
6C5																		
6C6																		
6C7																		
6C8																		
6C9																		
6CA																		
6CB																		
6CC																		
6CD																		
6CE																		
6CF																		
6D0																		
6D1																		
6D2																		
6D3																		
6D4																		
6D5																		
6D6																		
6D7																		
6D8																		
6D9																		
6DA																		
6DB																		
6DC																		
6DD																		
6DE																		
6DF																		
6E0																		
6E1																		
6E2																		
6E3																		
6E4																		
6E5																		
6E6																		
6E7																		
6E8																		
6E9																		
6EA																		
6EB																		
6EC																		
6ED																		
6EE																		
6EF																		
6F0																		
6F1																		
6F2																		
6F3																		
6F4																		
6F5																		
6F6																		
6F7																		
6F8																		
6F9																		
6FA																		
6FB																		
6FC																		
6FD																		
6FE																		
6FF																		
MODEL									MODEL									
LETTER NO.									LETTER NO.									

MEMORY MAP (Continued)

MODEL : GA-7_IXC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING				TV PRODUCTION ENGINEERING						
EEPROM CHECK DATA LIST 30									ISSUED DATE : 1 MARCH 2007			ISSUED DATE :				ISSUED DATE : 28 JUNE 2007						
									MANAGER			MANAGER			MANAGER				MATSUNAGA			
									CHIEF			CHIEF			CHIEF				ISMAL			
									ENGINEER T.01			ENGINEER				ENGINEER CHIN						
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																						
ADDRESS (HEX)	DATA								MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INTAL						
	D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK					
740																						
741																						
742																						
743																						
744																						
745																						
746																						
747																						
748																						
749																						
74A																						
74B																						
74C																						
74D																						
74E																						
74F																						
750																						
751																						
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754																						
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756																						
757																						
758																						
759																						
75A																						
75B																						
75C																						
75D																						
75E																						
75F																						
760																						
761																						
762																						
763																						
764																						
765																						
766																						
767																						
768																						
769																						
76A																						
76B																						
76C																						
76D																						
76E																						
76F																						
770																						
771																						
772																						
773																						
774																						
775																						
776																						
777																						
778																						
779																						
77A																						
77B																						
77C																						
77D																						
77E																						
77F																						
MODEL									MODEL													
LETTER NO.									LETTER NO.													

MEMORY MAP (Continued)

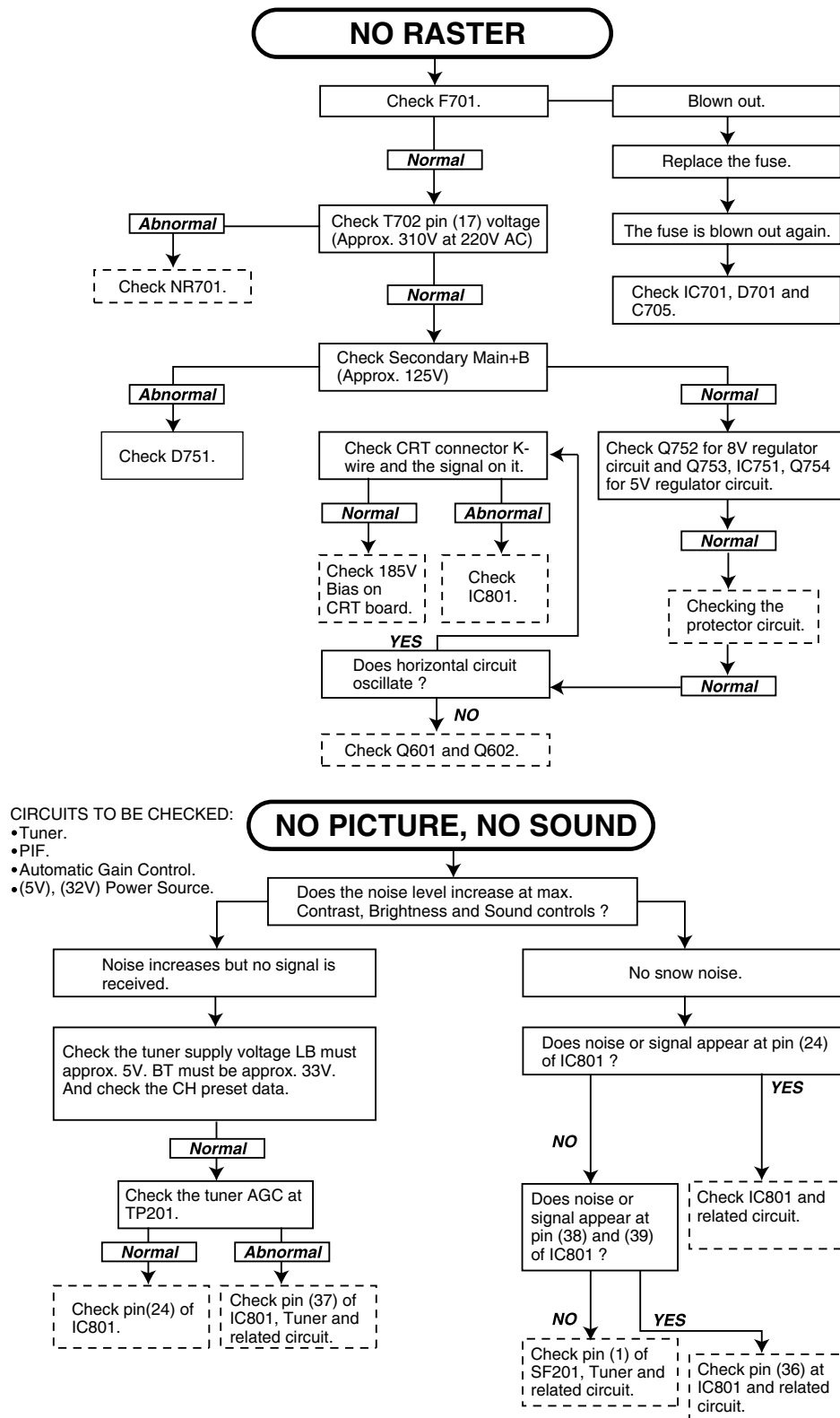
MODEL : GA-7_IXC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING				TV PRODUCTION ENGINEERING						
EEPROM CHECK DATA LIST 31									ISSUED DATE : 1 MARCH 2007			ISSUED DATE :				ISSUED DATE : 28 JUNE 2007						
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									CHIEF			CHIEF			CHIEF				ISMAIL			
									ENGINEER Tan			ENGINEER				ENGINEER CHIN						
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																						
ADDRESS (HEX)	DATA								MICRON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INTAL	REMARK					
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			BETTING DATA				
780																						
781																						
782																						
783																						
784																						
785																						
786																						
787																						
788																						
789																						
78A																						
78B																						
78C																						
78D																						
78E																						
78F																						
790																						
791																						
792																						
793																						
794																						
795																						
796																						
797																						
798																						
799																						
79A																						
79B																						
79C																						
79D																						
79E																						
79F																						
7A0																						
7A1																						
7A2																						
7A3																						
7A4																						
7A5																						
7A6																						
7A7																						
7A8																						
7A9																						
7AA																						
7AB																						
7AC																						
7AD																						
7AE																						
7AF																						
7B0																						
7B1																						
7B2																						
7B3																						
7B4																						
7B5																						
7B6																						
7B7																						
7B8																						
7B9																						
7BA																						
7BB																						
7BC																						
7BD																						
7BE																						
7BF																						
MODEL									MODEL													
LETTER NO.									LETTER NO.													

MEMORY MAP (Continued)

MODEL : GA-7_XC129WJN1									SEM PCD SOFTWARE GROUP			TV DESIGN ENGINEERING				TV PRODUCTION ENGINEERING			
									ISSUED DATE : 1 MARCH 2007			ISSUED DATE :				ISSUED DATE : 28 JUNE 2007			
EEPROM CHECK DATA LIST 32									MANAGER			MANAGER				MANAGER			
									CHIEF			CHIEF				CHIEF			
									ENGINEER			ENGINEER				ENGINEER			
									Tan							CHIN			
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF) A8(400-4FF) AA(500-5FF) AC(600-6FF) AE(700-7FF)																			
ADDRESS	DATA								MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL			
(HEX)	D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK		
7C0																			
7C1																			
7C2																			
7C3																			
7C4																			
7C5																			
7C6																			
7C7																			
7C8																			
7C9																			
7CA																			
7CB																			
7CC																			
7CD																			
7CE																			
7CF																			
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7D1																			
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7D3																			
7D4																			
7D5																			
7D6																			
7D7																			
7D8																			
7D9																			
7DA																			
7DB																			
7DC																			
7DD																			
7DE																			
7DF																			
7E0																			
7E1																			
7E2																			
7E3																			
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7E7																			
7E8																			
7E9																			
7EA																			
7EB																			
7EC																			
7ED																			
7EE																			
7EF																			
7F0																			
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7F4																			
7F5																			
7F6																			
7F7																			
7F8																			
7F9																			
7FA																			
7FB																			
7FC																			
7FD																			
7FE																			
7FF																			
MODEL									MODEL										
LETTER NO.									LETTER NO.										

CHAPTER 5. TROUBLE SHOOTING FLOWCHART

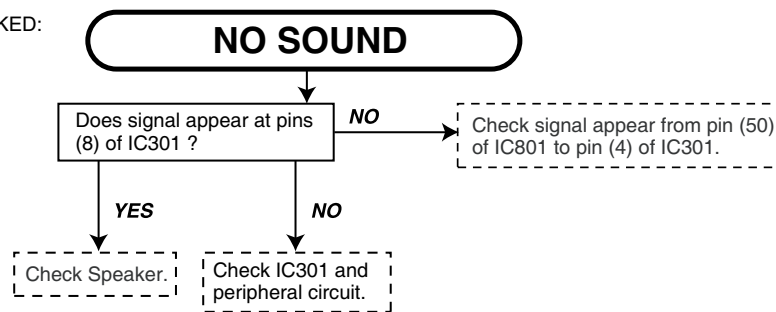
[1] TROUBLE SHOOTING FLOWCHART



TROUBLE SHOOTING FLOWCHART (Continued)

CIRCUITS TO BE CHECKED:

- Sound Detector Circuit.
- Sound Switch and Att. Control.
- Audio Output Circuit.



NEITHER VERTICAL NOR HORIZONTAL SYNCHRONIZATION

CIRCUIT TO BE CHECKED:

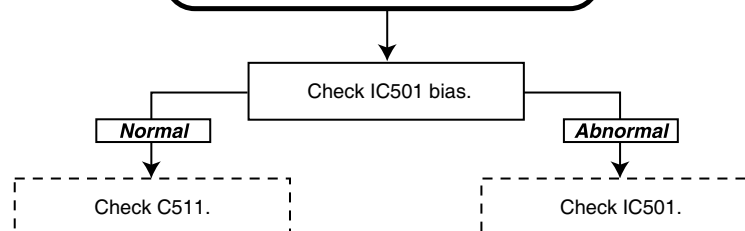
- Sync. Separator Circuit.

Check pins(9), (13) and (14) of IC801.

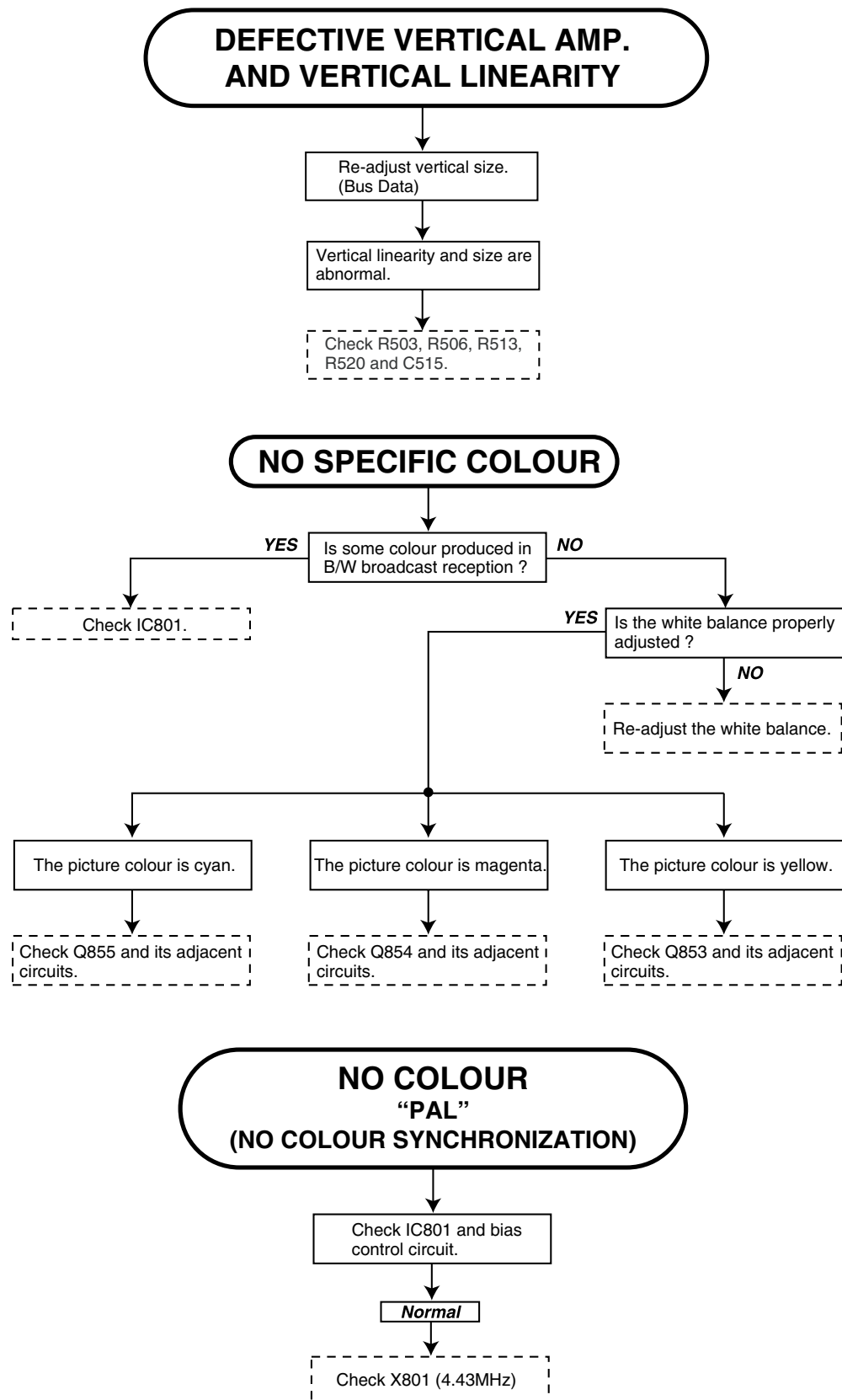
```

graph TD
    A([NEITHER VERTICAL NOR HORIZONTAL SYNCHRONIZATION]) --> B[Check pins(9), (13) and (14) of IC801.]
  
```

NO VERTICAL SCAN



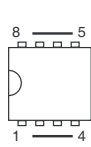
TROUBLE SHOOTING FLOWCHART (Continued)



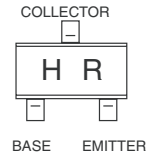
CHAPTER 6. SOLID STATE DEVICE BASE DIAGRAM

[1] SOLID STATE DEVICE BASE DIAGRAM

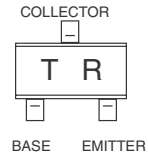
TOP VIEW



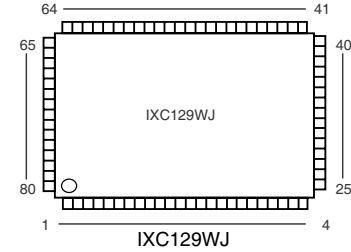
M24C08



C3928

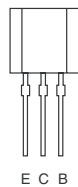


A1530

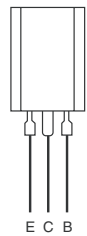


EX1393C

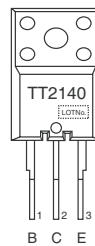
SIDE VIEW



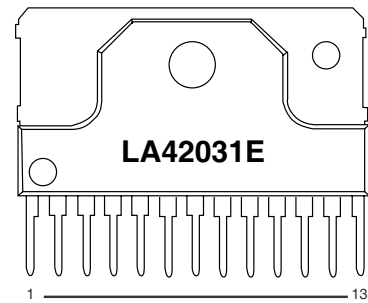
2SC3198



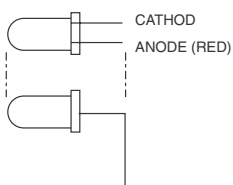
**2SD468-C
2SC2235**



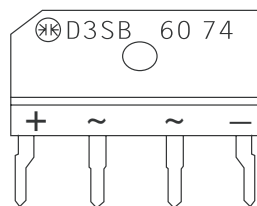
TT2140



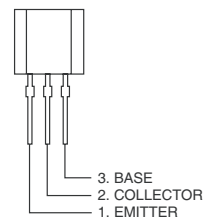
LA42031E



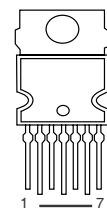
PX0013



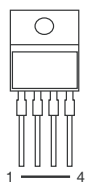
DX0476CE



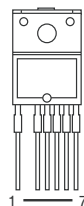
BF422



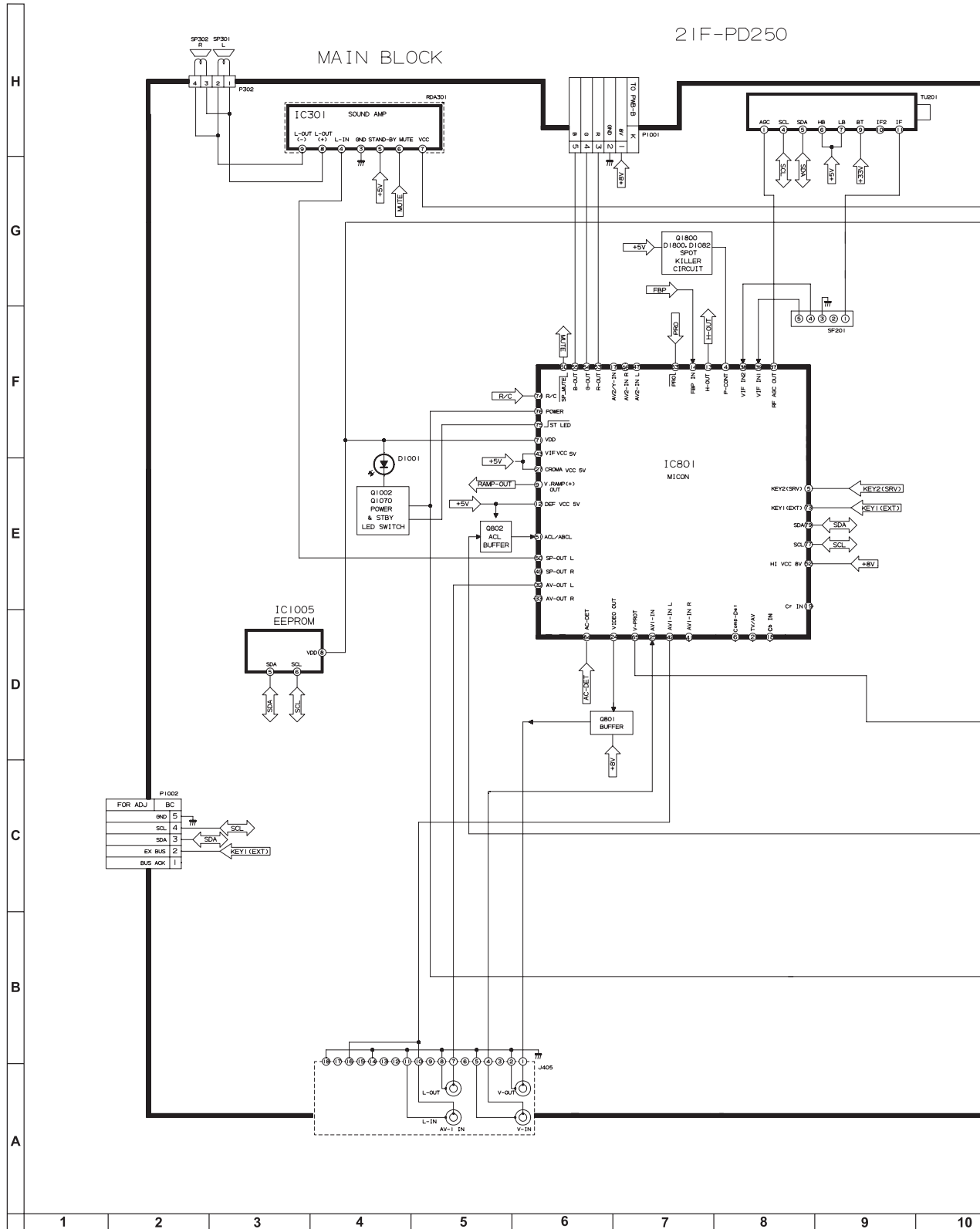
STV9302B



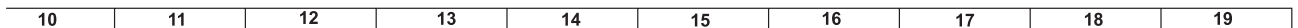
PQ05RDA



STRW5453

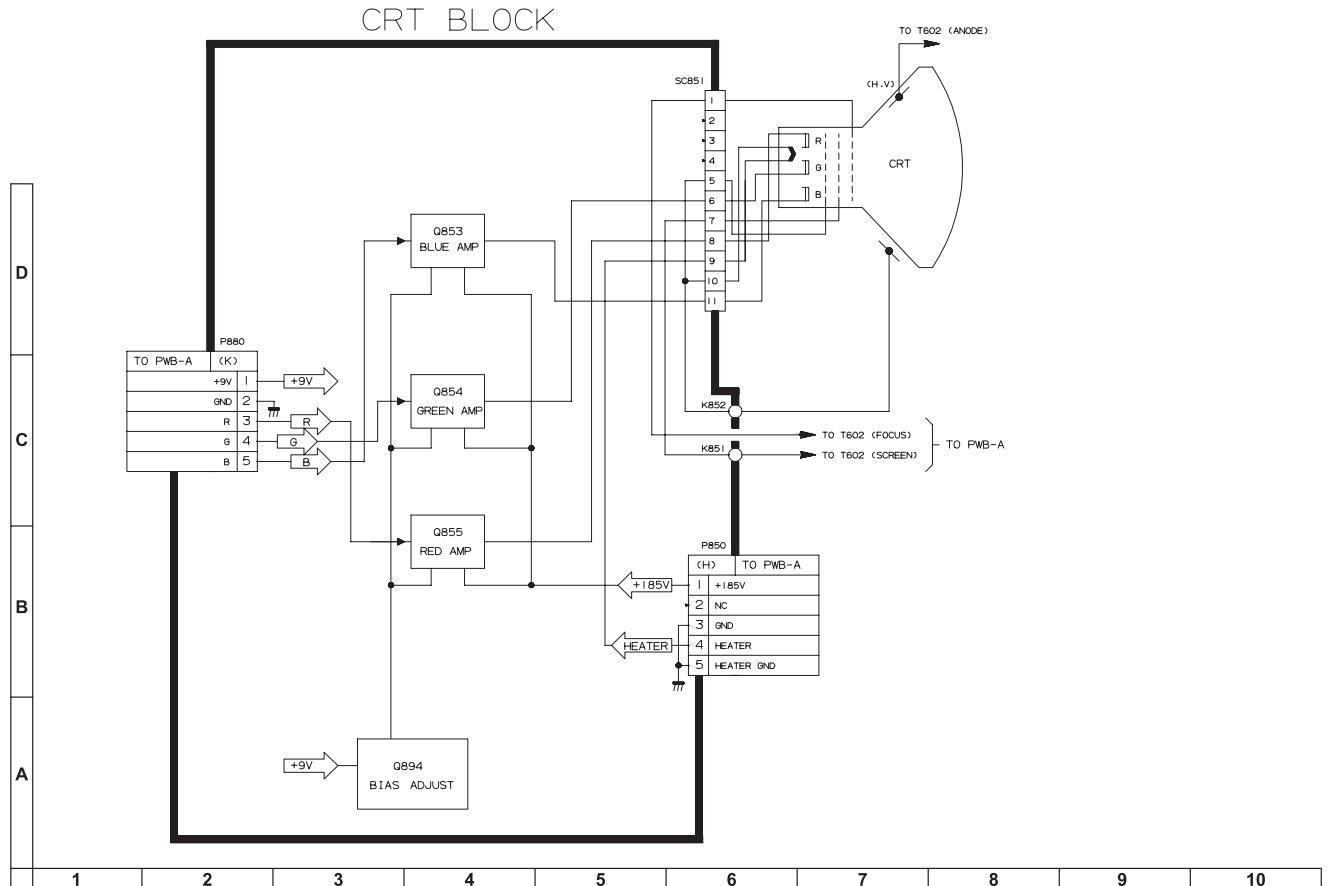






[2] BLOCK DIAGRAM: CRT UNIT

21F-PT220 / 21F-PD250 /
21F-PA18 / 21F-PA18 (B)



CHAPTER 9. DESCRIPTION OF SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM

SAFETY NOTES:

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "△" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE (— · —) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

CAUTION:

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

NOTES:

1. The unit of resistance "ohm" is omitted. (K = 1000 ohms, M = Mega ohm).
2. All resistors are 1/16 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted. (P = $\mu\mu\text{F}$).

VOLTAGE MEASUREMENT CONDITIONS:

1. Voltages in parenthesis measured with no signal.
2. Voltages without parenthesis measured with 3mV B & W or Colour signal.
3. All the voltages in each point are measured with VTVM.

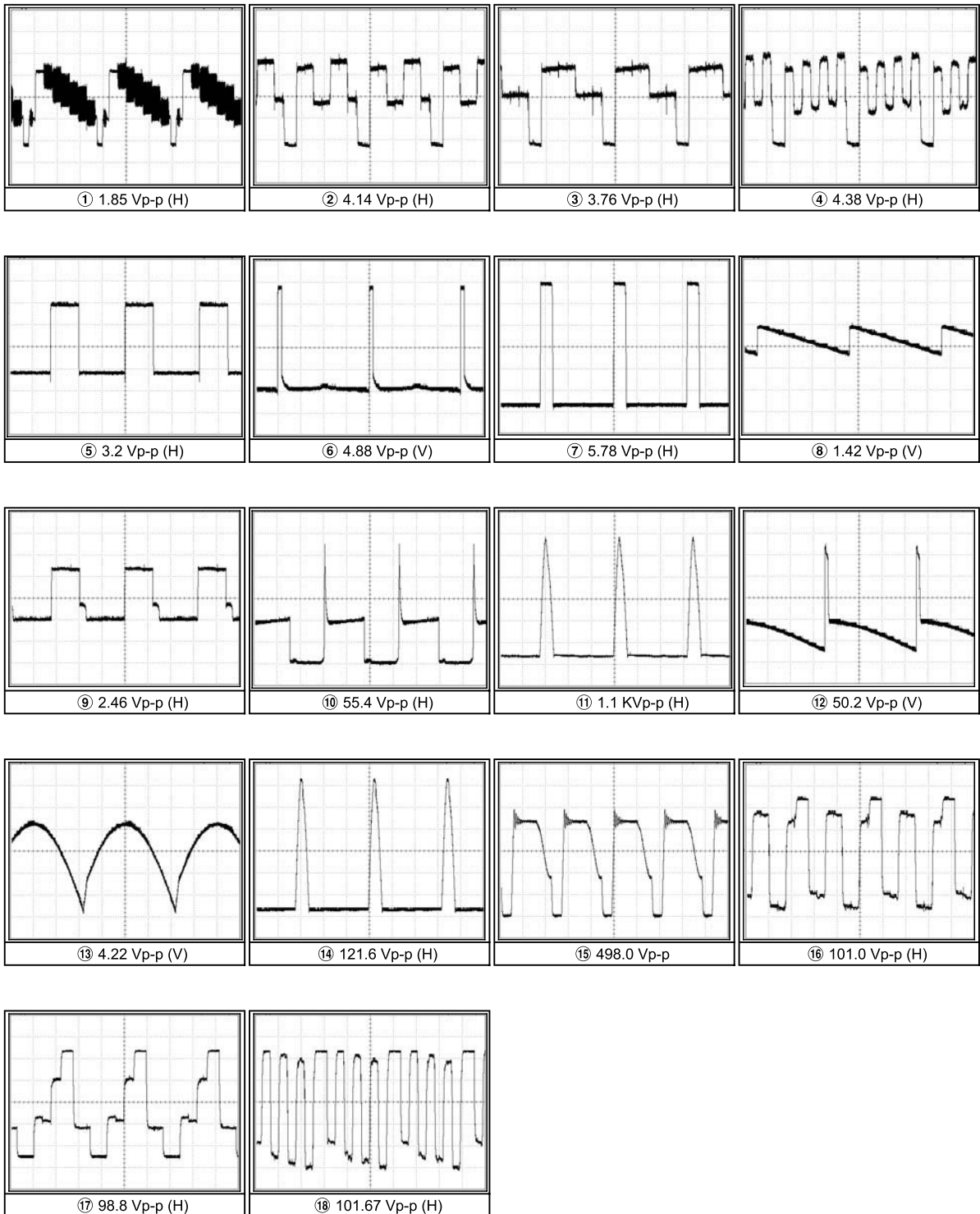
WAVEFORM MEASUREMENT CONDITIONS:

1. The colour bar generator signal of 1.0V peak applied at pin (25) of IC801.
2. Approximately 4V AGC bias.

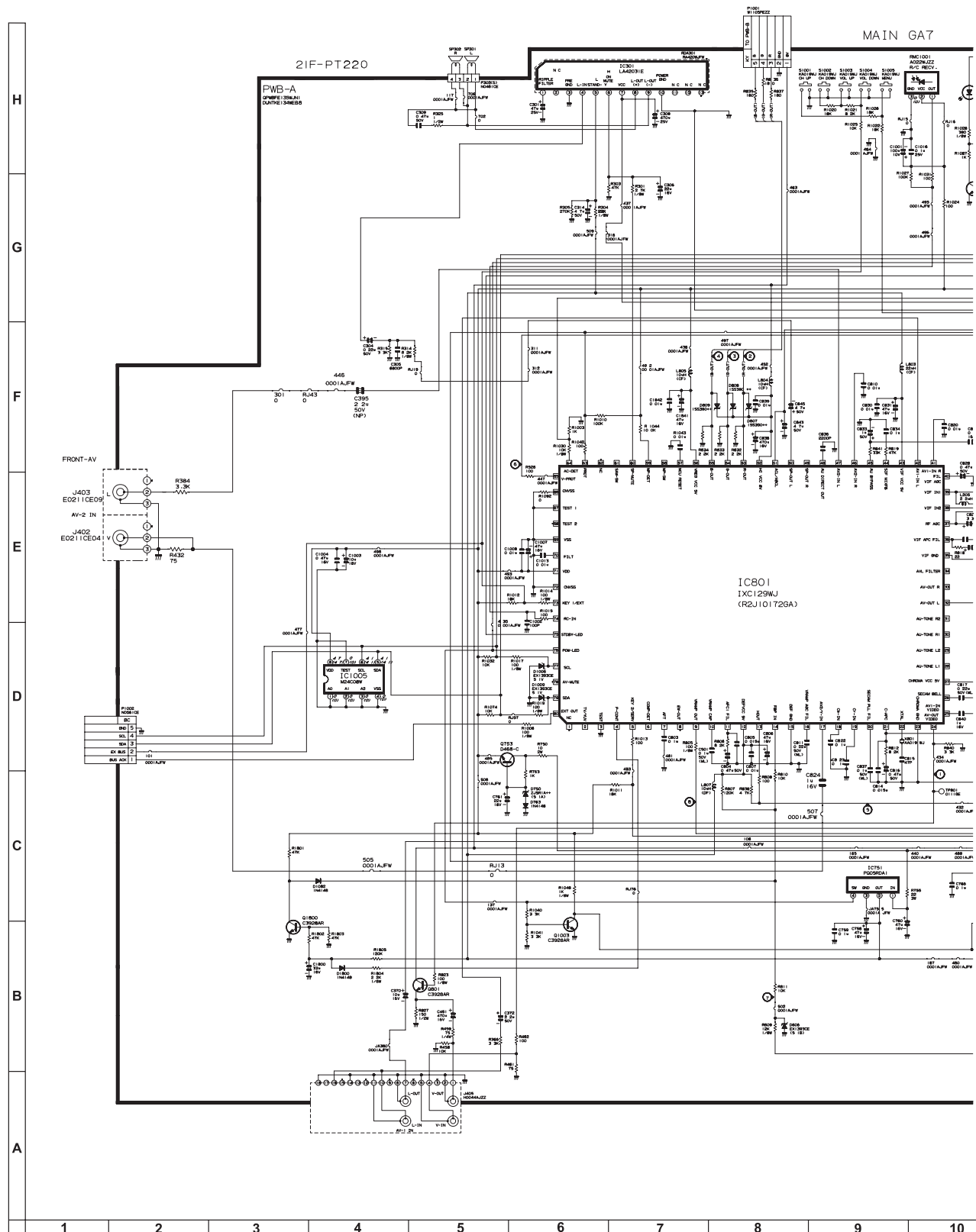
CHAPTER 10. WAVEFORMS

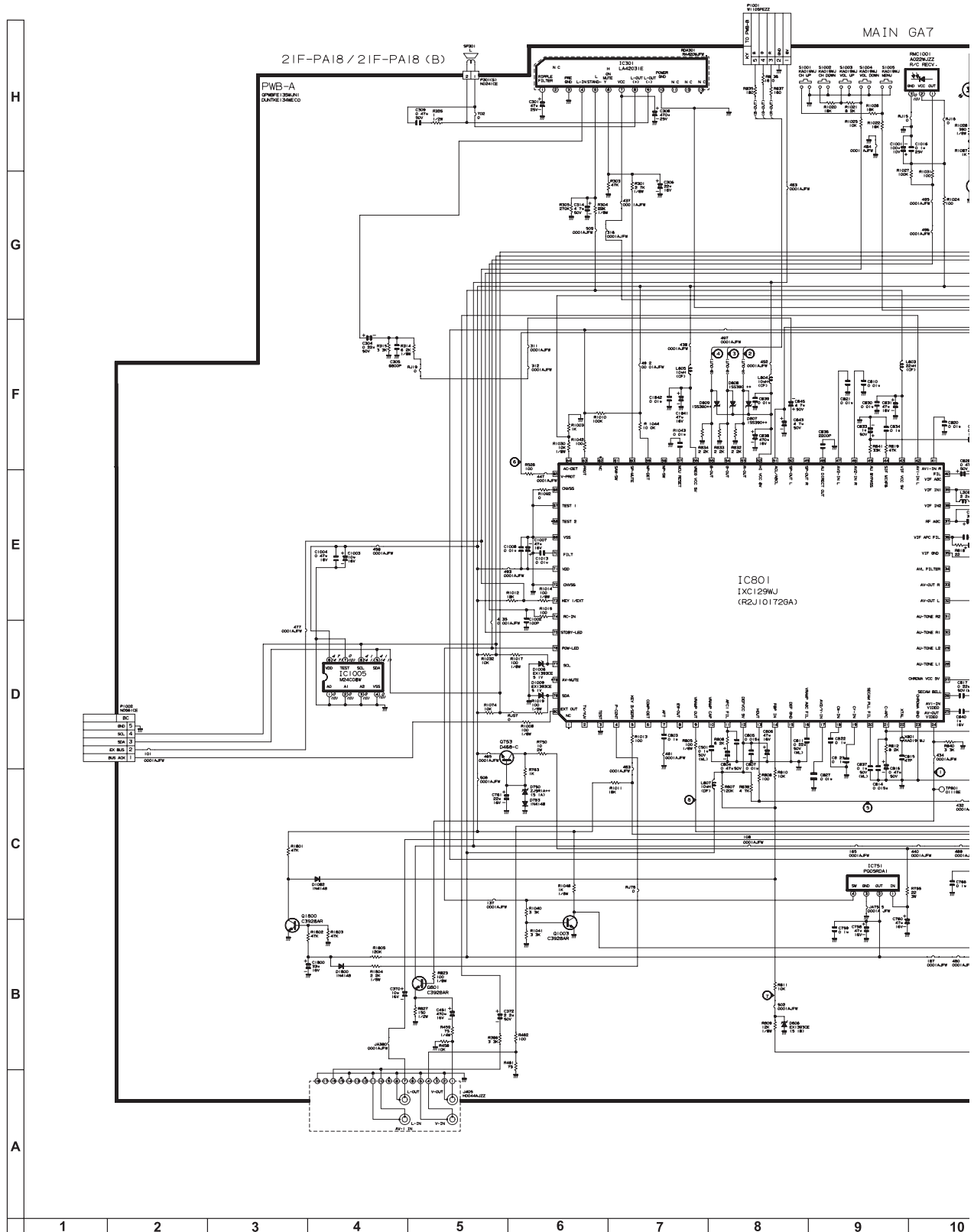
[1] WAVEFORMS

WAVEFORMS



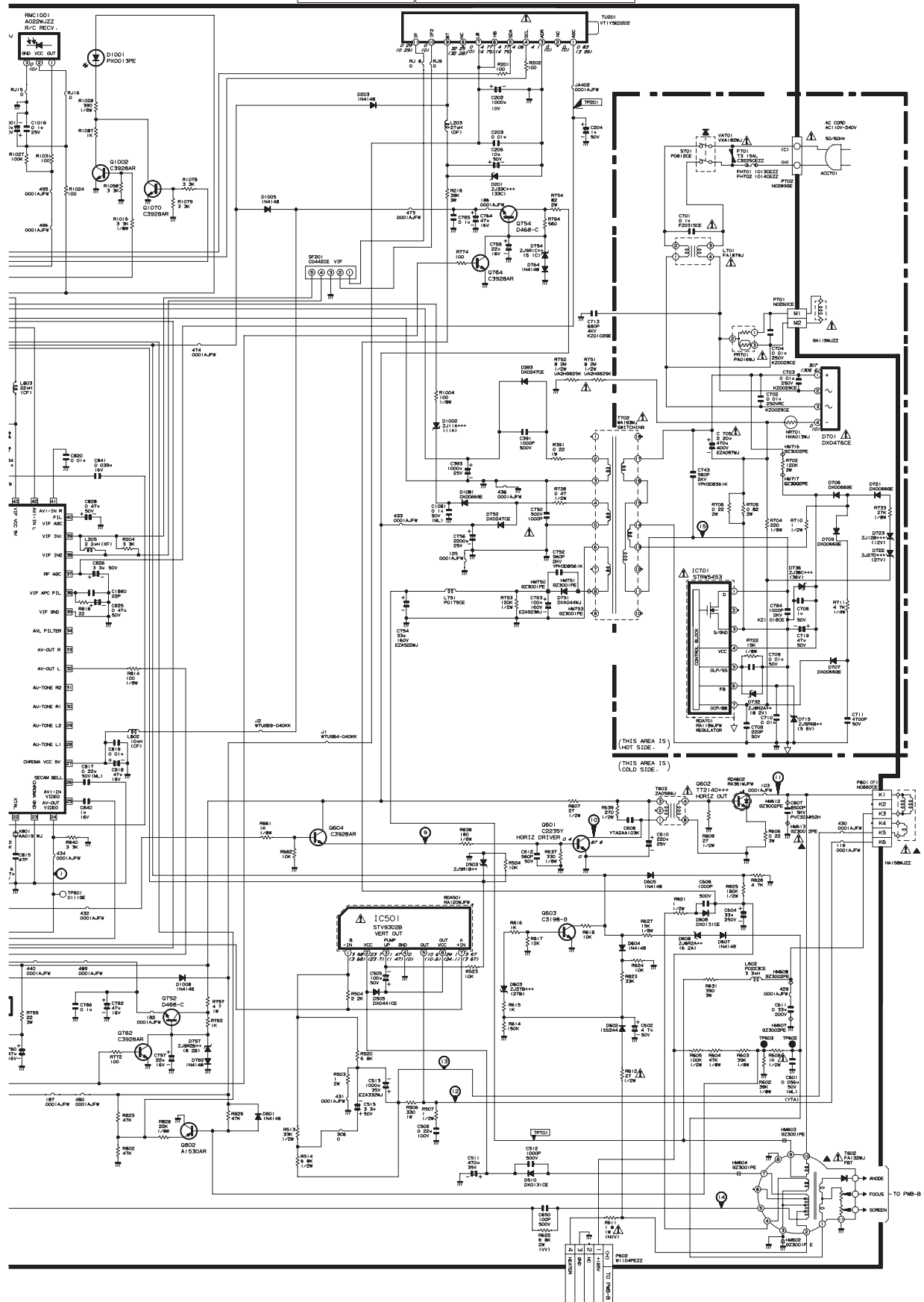
[2] SCHEMATIC DIAGRAM: MAIN UNIT



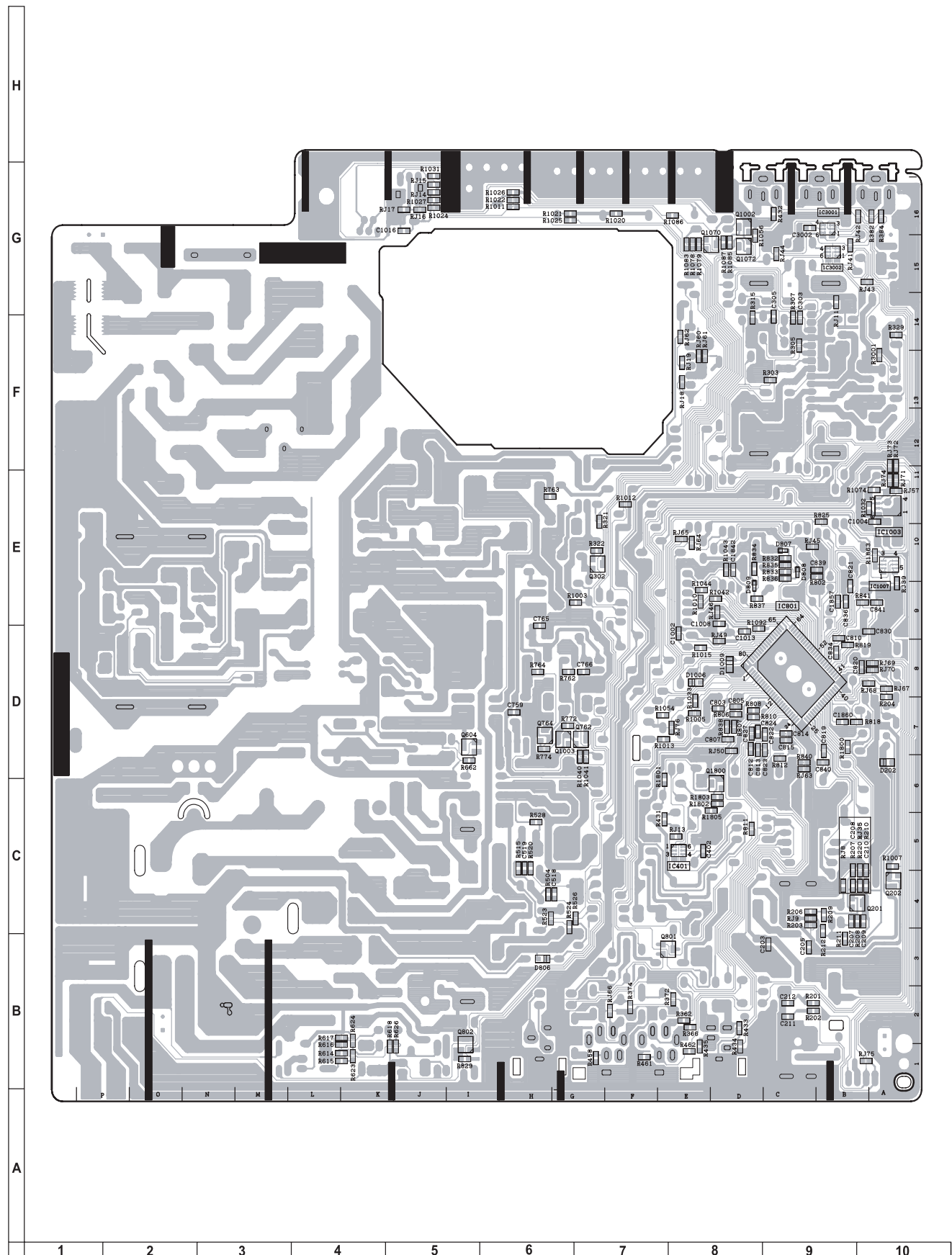


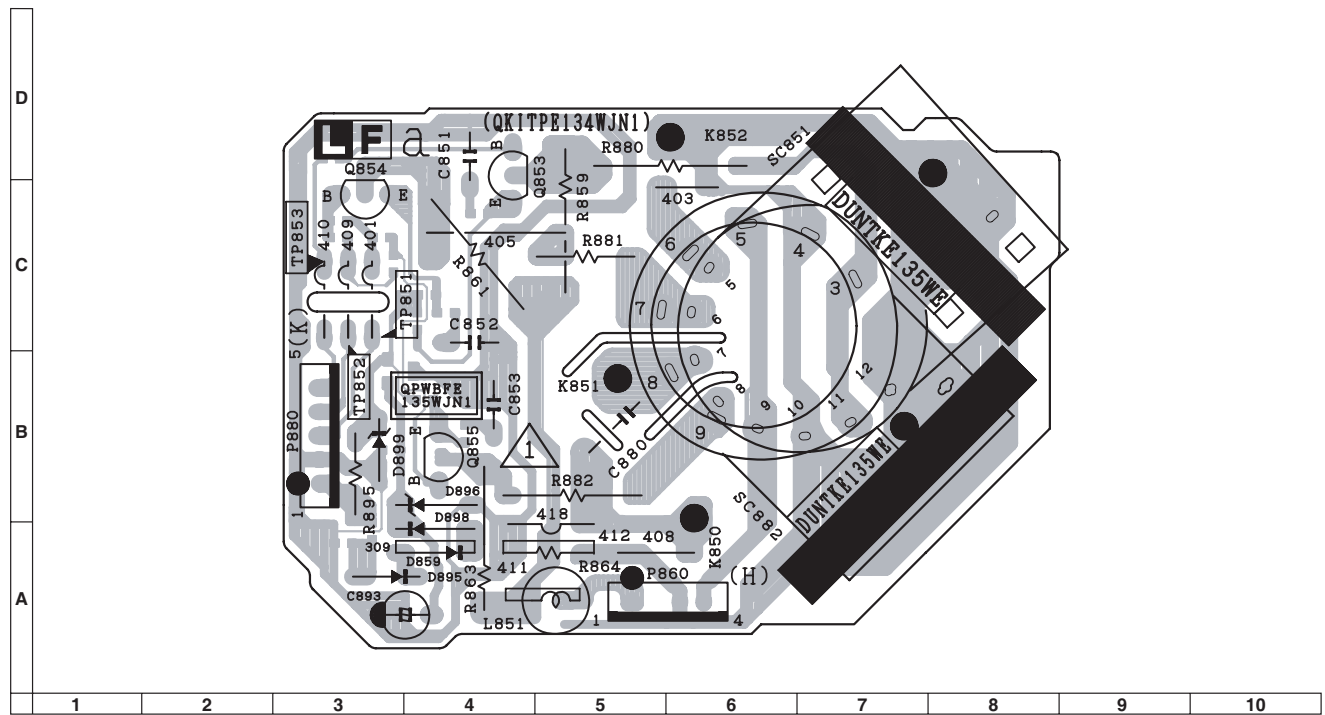
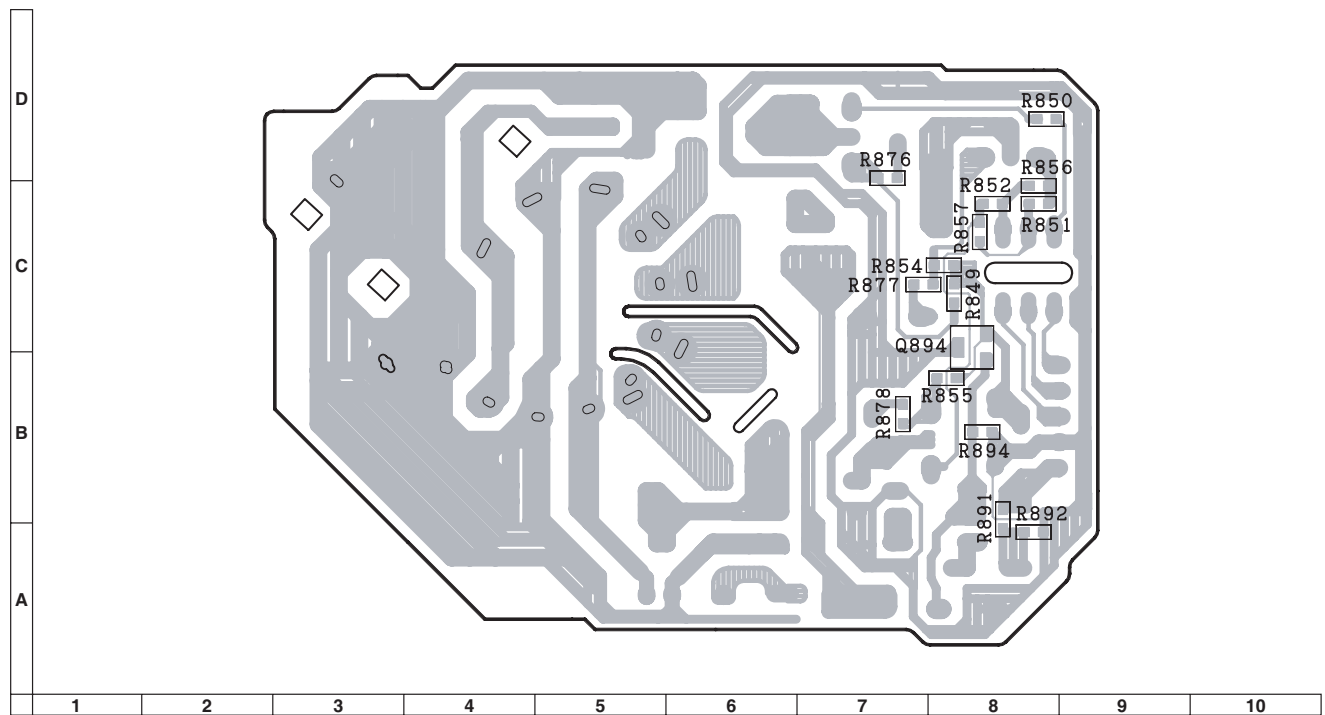
21F-PT220 / 21F-PD250 /
21F-PA18 / 21F-PA18 (B)

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED.
(OH=1000 OHMS, MEG=1000000)
2. ALL RESISTORS ARE 1/8W WATT UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE P. WITH PREFIX SYMBOL.
(u. P. ETC.).
▲ AND SHADED COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS



[2] PWB-A: MAIN CHIP SIDE



[3] PWB-B: CRT COMPONENT SIDE**[4] PWB-B: CRT CHIP SIDE**

SHARP PARTS GUIDE

	21F-PT220
	21F-PD250
	21F-PA18
MODEL	21F-PA18(B)

CONTENTS

- | | |
|--|--------------------------|
| [1] PICTURE TUBE | [5] MISCELLANEOUS PARTS |
| [2] PRINTED WIRING BOARD
ASSEMBLIES | [6] SUPPLIED ACCESSORIES |
| [3] MAIN UNIT | [7] CABINET PARTS |
| [4] CRT UNIT | [8] PACKING PARTS |

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

NO.	PARTS CODE	DESCRIPTION
[1] PICTURE TUBE		
△	VB51LYZ395X1E	Picture Tube (ITC Type)
△	RCILGA112WJZZ	Degaussing Coil
	QEARCA012WJZZ	Coring Ground Wire
[2] PRINTED WIRING BOARD ASSEMBLIES		
	DUNTKE134WEB8	Main Unit (21F-PT220)
	DUNTKE134WEC0	Main Unit (21F-PA18, 21F-PA18(B))
	DUNTKE134WEC2	Main Unit (21F-PD250)
	DUNTKE135WEB8	CRT Unit (21F-PT220)
	DUNTKE135WEC0	CRT Unit (21F-PA18, 21F-PA18(B))
	DUNTKE135WEC1	CRT Unit (21F-PD250)
[3] MAIN UNIT		
△	TU201 VTUVT1Y5ED202	Tuner
	IC301 VHILA42031E-1	I.C., LA42031E
△	IC501 VHISTV9302B-1	I.C., STV9302B
△	IC701 VHISTRW5453-1	I.C., STR-W5453A LF
	IC751 VHIPQ05RDA1-1	I.C., PQ050RDA1SZH
	IC801 RH-IXC129WJZZQ	I.C.,
	IC1005 VHIM24C08W/-1	I.C., M24C08
	Q601 VS2SC2235Y/1E+	Transistor, 2SC2235
	Q602 VSTT2140+++F	Transistor, TT2140
	Q603 VS2SC3198-G-1+	Transistor, 2SC3198
	Q604 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q752 VS2SD468-C/-1+	Transistor, 2SD468
	Q753 VS2SD468-C/-1+	Transistor, 2SD468
	Q754 VS2SD468-C/-1+	Transistor, 2SD468
	Q762 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q764 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q801 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q802 VS2SA1530AR-1*	Transistor, 2SA1530AR
	Q1002 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q1003 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q1070 VS2SC3928AR-1*	Transistor, 2SC3928AR
	Q1800 VS2SC3928AR-1*	Transistor, 2SC3928AR
	D201 VHEZJ33C+++1E*	Zener Diode, 33V
	D203 VHD1N4148/-1*	Diode, 1N4148
	D393 RH-DX0247CEZZ	Diode, DX0247CE
	D503 VHEZJ5R1B++1E*	Zener Diode, 5.1V
	D505 RH-DX0441CEZZ*	Diode, DX0441CE
	D510 RH-DX0131CEZZ*	Diode, DX0131CE
	D602 VHD1SS244/-1*	Diode, 1SS244
	D603 VHEZJ27B+++1E*	Zener Diode, 27V
	D604 VHD1N4148/-1*	Diode, 1N4148
	D605 VHD1N4148/-1*	Diode, 1N4148
	D606 RH-DX0131CEZZ*	Diode, DX0131CE
	D607 VHD1N4148/-1*	Diode, 1N4148
	D608 VHEZJ6R2A++1E*	Zener Diode, 6.2V
△	D701 RH-DX0476CEZZ	Diode, DX0476CE
	D706 RH-DX0066GEZZ*	Diode, DX0066GE
	D707 RH-DX0066GEZZ*	Diode, DX0066GE
	D709 RH-DX0066GEZZ*	Diode, DX0066GE
	D715 VHEZJ5R6B++1E*	Zener Diode, 5.6V
	D721 RH-DX0066GEZZ*	Diode, DX0066GE
	D722 VHEZJ27D+++1E*	Zener Diode, 27V
	D723 VHEZJ12B+++1E*	Zener Diode, 12V
	D732 VHEZJ8R2A++1E*	Zener Diode, 8.2V
	D736 VHEZJ36C+++1E*	Zener Diode, 36V
	D750 VHEZJ5R1A++1E*	Zener Diode, 5.1V
	D751 RH-DXA044WJZZ	Diode, DXA044WJ
	D752 RH-DX0247CEZZ	Diode, DX0247CE
	D754 VHEZJ5R1C++1E*	Zener Diode, 5.1V
	D757 VHEZJ8R2B++1E*	Zener Diode, 8.2V
	D762 VHD1N4148/-1*	Diode, 1N4148
	D763 VHD1N4148/-1*	Diode, 1N4148
	D764 VHD1N4148/-1*	Diode, 1N4148
	D801 VHD1N4148/-1*	Diode, 1N4148
	D806 RH-EX1393CEZZ*	Zener Diode, 5.1V
	D807 VHD1SS390++-1*	Diode, 1SS390
	D808 VHD1SS390++-1*	Diode, 1SS390
	D809 VHD1SS390++-1*	Diode, 1SS390
	D1001 RH-PX0013PEZZ	LED
	D1002 VHEZJ11A+++1E*	Zener Diode, 11V
	D1005 VHD1N4148/-1*	Diode, 1N4148
	D1006 RH-EX1393CEZZ*	Zener Diode, 5.1V
	D1008 VHD1N4148/-1*	Diode, 1N4148
	D1009 RH-EX1393CEZZ*	Zener Diode, 5.1V
	D1081 RH-DX0066GEZZ*	Diode, DX0066GE
	D1082 VHD1N4148/-1*	Diode, 1N4148
	D1800 VHD1N4148/-1*	Diode, 1N4148
	NR701 RH-HXA013WJZZ+	NTC Thermistor

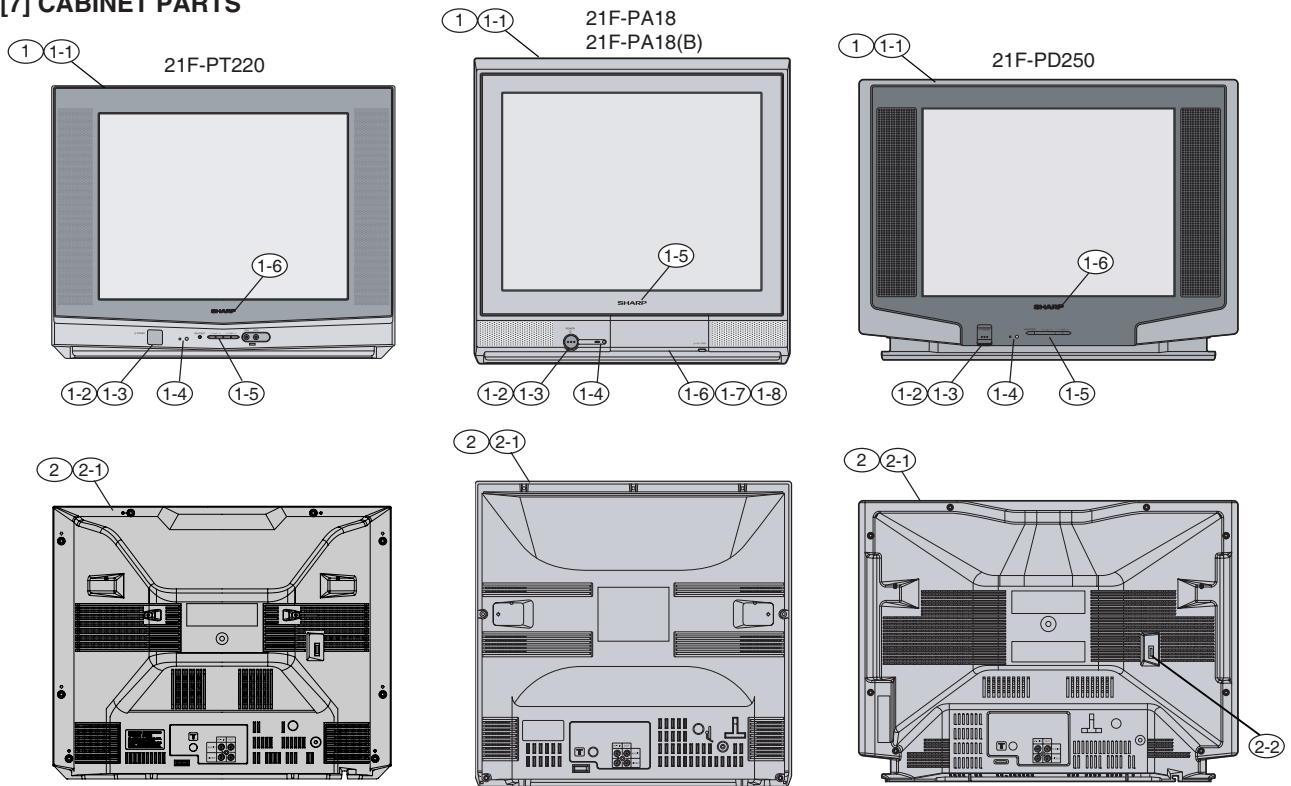
NO.	PARTS CODE	DESCRIPTION
[3] MAIN UNIT		
VA701	RH-VXA182WJZZ	Varistor
PR701	RMPTPA016WJZZ	PTC Thermistor (Positive resistor)
X801	RCRSAA019WJZZ	Crystal
L203	VP-DF270K0000*	Peaking Coil, 27mH
L205	VP-XF2R2K0000*	Peaking Coil, 2.2mH
L602	RCILP0223CEZZ+	Coil
L701	RCILFA187WJZZ	Coil
L751	RCILP0179CEZZ+	Coil
L802	VP-CF100K0000*	Peaking Coil, 10mH
L803	VP-CF220K0000*	Peaking Coil, 22mH
L804	VP-CF100K0000*	Peaking Coil, 10mH
L805	VP-CF100K0000*	Peaking Coil, 10mH
L807	VP-DF100K0000*	Peaking Coil, 10mH
SF201	RFILC0442CEZZ	SAW Filter
T602	RTRNFA132WJZZ	H-Volt Transformer
T603	RTRNZA058WJZZ	Transformer
T702	RTRNWA193WJZZ	Transformer
C202	VCEA0A1AW108M+	Capacitor, 1000μF 10V Electrolytic
C203	VCKYCY1HF103Z*	Capacitor, 0.01μF 50V Ceramic
C204	VCEA0A1HW105M+	Capacitor, 1000μF 10V Electrolytic
C206	VCEA0A1HW106M+	Capacitor, 10μF 50V Electrolytic
C301	VCEA0A1EW476M+	Capacitor, 47μF 25V Electrolytic
C304	VCEA0A1HW224M+	Capacitor, 0.22μF 50V Electrolytic
C305	VCKYCY1HB682K*	Capacitor, 6800pF 50V Ceramic
C306	VCEA0A1CW226M+	Capacitor, 22μF 16V Electrolytic
C308	VCEA0A1EW477M+	Capacitor, 470μF 25V Electrolytic
C309	VCIFYFA1HA474J+	Capacitor, 0.47μF 50V Plastic
C314	VCEA0A1HW475M+	Capacitor, 4.7μF 50V Electrolytic
C370	VCEA0A1CW106M+	Capacitor, 10μF 16V Electrolytic
C372	VCEA0A1HW225M+	Capacitor, 2.2μF 50V Electrolytic
C391	VCKYPA2HB102K+	Capacitor, 1000pF 500V Ceramic
C393	VCEA0A1EW108M+	Capacitor, 1000μF 25V Electrolytic
C395	VCE9GA1HW225M+	Capacitor, 2.2μF 50V Electrolytic (Non Polar) (for 21F-PT220 only)
C451	VCEA0A1CW477M+	Capacitor, 470μF 16V Electrolytic
C501	VCIFYFA1HA104J+	Capacitor, 0.1μF 50V Plastic
C505	VCEA0A1HW107M+	Capacitor, 100μF 50V Electrolytic
C508	VCFYAA2AA224J+	Capacitor, 0.22μF 100V Plastic
C511	VCEA0A1VW477M+	Capacitor, 470μF 35V Electrolytic
C512	VCKYPA2HB102K+	Capacitor, 1000pF 500V Ceramic
C513	RC-EZA332WJZZ+	Capacitor, 1000μF 35V Electrolytic
C515	VCEACA1HC335J+	Capacitor, 3.3μF 50V Electrolytic
C601	VCQYTA1HM563J+	Capacitor, 0.056μF 50V Plastic
C602	VCEA0A1HW475M+	Capacitor, 4.7μF 50V Electrolytic
C604	VCEA0A2EW336M+	Capacitor, 33μF 250V Electrolytic
C606	VCKYPA2HB102K+	Capacitor, 1000pF 500V Ceramic
C607	VCFPVC3ZA852H	Capacitor, 8500pF 1.8kV Metalized Polypro Film
C608	VCQYTA2AA103K+	Capacitor, 0.01μF 100V Plastic
C610	VCEA0A1EW227M+	Capacitor, 220μF 25V Electrolytic
C611	VCFPVC2EC334J	Capacitor, 0.33μF 250V Plastic
C612	VCKYPA1HB561K+	Capacitor, 560pF 50V Ceramic
C650	VCKYPA2HB101K+	Capacitor, 100pF 500V Ceramic
C701	RC-FZ031SCEZZ	Capacitor, 0.1μF 275V Plastic
C702	RC-KZ0029CEZZ+	Capacitor, 0.01μF 250V Ceramic
C703	RC-KZ0029CEZZ+	Capacitor, 0.01μF 250V Ceramic
C704	RC-KZ0029CEZZ+	Capacitor, 0.01μF 250V Ceramic
C705	RC-EZA097WJZZ	Capacitor, 220μF 400V Electrolytic
C706	VCIFYFA1HA105J+	Capacitor, 1μF 50V Plastic
C708	VCKYPA1HB221K+	Capacitor, 220pF 50V Ceramic
C709	VCQYTA1HM103J+	Capacitor, 0.01μF 50V Plastic
C710	VCKYPA1HF103Z+	Capacitor, 0.01μF 50V Ceramic
C711	VCKYPA1HB472K+	Capacitor, 4700pF 50V Ceramic
C713	RC-KZ0102GEZZ	Capacitor, 680pF 250V Ceramic
C719	VCEA0A1HW476M+	Capacitor, 47μF 50V Electrolytic
C743	VCKYPH3DB561K	Capacitor, 560pF 2kV Ceramic
C750	VCKYPA2HB102K+	Capacitor, 1000pF 500V Ceramic
C752	VCKYPH3DB561K	Capacitor, 560F 2kV Ceramic
C753	RC-EZA523WJZZ	Capacitor, 100μF 160V Electrolytic
C754	RC-EZA522WJZZ	Capacitor, 33μF 160V Electrolytic
C755	VCEA0A1CW226M+	Capacitor, 22μF 16V Electrolytic
C756	VCEA0A1EW228M	Capacitor, 2200μF 25V Electrolytic
C757	VCEA0A1CW226M+	Capacitor, 22μF 16V Electrolytic
C758	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C759	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic
C760	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C761	VCEA0A1CW226M+	Capacitor, 22μF 16V Electrolytic
C762	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C764	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C765	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic
C766	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic
C784	RC-KZ1018CEZZ+	Capacitor, 1000pF 2kV Plastic
C803	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic

NO.	PARTS CODE	DESCRIPTION
[3] MAIN UNIT		
C804	VCEA0A1HW474M+	Capacitor, 0.47μF 50V Electrolytic
C805	VCKYCY1HB153K*	Capacitor, 0.015μF 50V Ceramic
C806	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C807	VCKYCY1HF103Z*	Capacitor, 0.01μF 16V Ceramic
C810	VCKYCY1HF103Z*	Capacitor, 0.01μF 16V Ceramic
C811	VCFYFA1HA224J+	Capacitor, 0.22μF 50V Plastic
C814	VCKYCY1HB153K*	Capacitor, 0.015μF 50V Ceramic
C815	VCCCY1HH470J*	Capacitor, 47pF 50V Ceramic
C816	VCEA0A1HW474M+	Capacitor, 0.47μF 50V Electrolytic
C817	VCFYFA1HA224J+	Capacitor, 0.22μF 50V Plastic
C818	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C819	VCKYCY1HB103K*	Capacitor, 0.01μF 50V Ceramic
C820	VCKYCY1HF103Z*	Capacitor, 0.01μF 16V Ceramic
C821	VCKYCY1HF103Z*	Capacitor, 0.01μF 16V Ceramic (for 21F-PD250 / 21F-PA18 / 21F-PA18(B) only)
C822	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic
C823	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic
C824	VCKYCY1CF105Z*	Capacitor, 1μF 16V Ceramic (for 21F-PT220 only)
C825	VCEA0A1HW474M+	Capacitor, 0.47μF 50V Electrolytic
C826	VCEA0A1HW335M+	Capacitor, 3.3μF 50V Electrolytic
C827	VCKYCY1HF103Z*	Capacitor, 0.01μF 16V Ceramic (for 21F-PD250 / 21F-PA18 / 21F-PA18(B) only)
C828	VCEA0A1HW474M+	Capacitor, 0.47μF 50V Electrolytic
C830	VCKYCY1HB103K*	Capacitor, 0.01μF 50V Ceramic
C831	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C833	VCEA0A1HW105M+	Capacitor, 1μF 50V Electrolytic
C834	VCKYCY1HB104K*	Capacitor, 0.1μF 50V Ceramic
C836	VCKYCY1HB222K*	Capacitor, 2200pF 50V Ceramic
C837	VCFYFA1HA104J+	Capacitor, 0.1μF 50V Plastic
C838	VCEA0A1CW477M+	Capacitor, 470μF 16V Electrolytic
C839	VCKYCY1HB103K*	Capacitor, 0.01μF 50V Ceramic
C840	VCKYCY1CF105Z*	Capacitor, 1μF 16V Ceramic
C841	VCKYCY1CB393K*	Capacitor, 0.039μF 16V Ceramic
C843	VCEA9M1HW475M+	Capacitor, 4.7μF 50V Electrolytic
C845	VCEA9M1HW475M+	Capacitor, 4.7μF 50V Electrolytic
C1001	VCEA0A1AW107M+	Capacitor, 100μF 10V Electrolytic
C1002	VCCCY1HH101J*	Capacitor, 100pF 50V Ceramic
C1003	VCEA9M1CW106M+	Capacitor, 10μF 16V Electrolytic
C1004	VCKYCY1CF474Z*	Capacitor, 0.47μF 16V Ceramic
C1007	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C1008	VCKYCY1HF103Z*	Capacitor, 0.01μF 50V Ceramic
C1013	VCKYCY1HF103Z*	Capacitor, 0.01μF 50V Ceramic
C1016	VCKYCY1EF104Z*	Capacitor, 0.1μF 25V Ceramic
C1081	VCFYFA1HA104J+	Capacitor, 0.1μF 50V Plastic
C1800	VCEA0A1CW336M+	Capacitor, 33μF 16V Electrolytic
C1841	VCEA0A1CW476M+	Capacitor, 47μF 16V Electrolytic
C1842	VCKYCY1HB103K*	Capacitor, 0.01μF 50V Ceramic
C1860	VCCCY1HH220J*	Capacitor, 22pF 50V Ceramic
RJ8	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ9	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ13	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide (for 21F-PT220 only)
RJ15	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ16	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ19	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ43	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide (for 21F-PT220 only)
RJ45	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ46	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ49	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ50	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ57	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ62	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ67	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ68	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ69	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ71	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ72	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ73	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ74	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ75	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
RJ76	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
R201	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R202	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R204	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R216	VRS-VV3LB393J	Resistor, 39k 3W Metal Oxide
R301	VRD-RA2BE272J*	Resistor, 2.7k 1/8W Carbon
R303	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R304	VRD-RA2BE223J*	Resistor, 22k 1/8W Carbon
R305	VRS-CY1JF274J*	Resistor, 270k 1/16W Metal Oxide
R314	VRD-RA2BE822J*	Resistor, 8.2k 1/8W Carbon
R315	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R325	VRD-RM2HD1R0J*	Resistor, 1 1/2W Carbon
R366	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R384	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide (for 21F-PT220 only)

NO.	PARTS CODE	DESCRIPTION
[3] MAIN UNIT		
R391	VRN-VV3ABR22J	Resistor, 0.22 1W Metal Film
R432	VRS-CY1JF750J*	Resistor, 75 1/16W Metal Oxide (for 21F-PT220 only)
R458	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R459	VRD-RA2EE750J*	Resistor, 75 1/4 Carbon
R461	VRS-CY1JF750J*	Resistor, 75 1/16W Metal Oxide
R462	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R503	VRN-VV3DB1R0J	Resistor, 1 2W Metal Film
R504	VRS-CY1JF222J*	Resistor, 2.2k 1/16W Metal Oxide
R506	VRS-VV3AB331J	Resistor, 330 1W Metal Film
R507	VRD-RM2HD1R0J*	Resistor, 1 1/2W Carbon
R513	VRD-RM2HD333J*	Resistor, 33k 1/2W Carbon
R514	VRD-RM2HD682J*	Resistor, 6.8k 1/2W Carbon
R520	VRS-CY1JF682J*	Resistor, 6.8k 1/16W Metal Oxide
R523	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R524	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R526	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R602	VRD-RA2BE393J*	Resistor, 39k 1/8W Carbon
R603	VRD-RA2BE393J*	Resistor, 39k 1/8W Carbon
R604	VRD-RA2BE473J*	Resistor, 47k 1/8W Carbon
R605	VRD-RM2HD104J*	Resistor, 100k 1/2W Carbon
R606	VRN-VV3LBR22J	Resistor, 0.22 3W Metal Film
R607	VRD-RM2HD270J*	Resistor, 27 1/2W Carbon
R608	VRD-RM2HD102J*	Resistor, 1k 1/2W Carbon
R609	VRD-RM2HD270J*	Resistor, 27 1/2W Carbon
R611	VRN-VV3AB1R8J	Resistor, 1.8 1W Metal Film
R612	VRD-RM2HD270J*	Resistor, 27 1/2W Carbon
R614	VRS-CY1JF154J*	Resistor, 150k 1/16W Metal Oxide
R615	VRS-CY1JF102J*	Resistor, 1k 1/16W Metal Oxide
R616	VRS-CY1JF102J*	Resistor, 1k 1/16W Metal Oxide
R617	VRS-CY1JF123J*	Resistor, 12k 1/16W Metal Oxide
R618	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R621	VRN-SV2HC1R0J	Resistor, 1 1/2W Metal Oxide
R622	VRS-VV3DB682J	Resistor, 6.8k 2W Metal Oxide
R623	VRS-CY1JF333J*	Resistor, 33k 1/16W Metal Oxide
R624	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R625	VRD-RM2HD184J*	Resistor, 180k 1/2W Carbon
R626	VRS-CY1JF472J*	Resistor, 4.7k 1/16W Metal Oxide
R627	VRD-RA2BE153J*	Resistor, 15k 1/8W Carbon
R631	VRS-VV3LB391J	Resistor, 390 3W Metal Oxide
R637	VRD-RA2BE331J*	Resistor, 330 1/8W Carbon
R638	VRD-RA2BE181J*	Resistor, 180 1/8W Carbon
R639	VRD-RM2HD271J*	Resistor, 270 1/2W Carbon
R661	VRD-RA2BE102J*	Resistor, 1k 1/8W Carbon
R662	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R702	VRS-VV3DB124J	Resistor, 120k 2W Metal Film
R704	VRD-RA2BE221J*	Resistor, 220 1/8W Carbon
R705	VRN-VV3DBR82J	Resistor, 0.82 2W Metal Film
R706	VRN-VV3DBR22J	Resistor, 0.22 2W Metal Film
R710	VRD-RM2HD220J*	Resistor, 22 1/2W Carbon
R710	VRD-RM2HD1R0J*	Resistor, 1 1/2W Carbon
R711	VRD-RA2EE472J*	Resistor, 4.7k 1/4W Carbon
R713	VRD-RA2BE222J*	Resistor, 2.2k 1/8W Carbon
R722	VRD-RA2BE153J*	Resistor, 15k 1/8W Carbon
R725	VRD-RM2HD821J*	Resistor, 820 1/2W Carbon
R726	VRN-SV2HCR47J	Resistor, 0.47 1/2W Metal Oxide
R733	VRD-RA2BE273J*	Resistor, 27k 1/8W Carbon
R750	VRS-VV3DB100J	Resistor, 10 2W Metal Oxide
R751	VRC-UA2HG825K*	Resistor, 8.2M 1/2W Solid Resistor
R752	VRC-UA2HG825K*	Resistor, 8.2M 1/2W Solid Resistor
R753	VRD-RM2HD124J*	Resistor, 120k 1/2W Carbon
R754	VRS-VV3DB820J	Resistor, 82 2W Metal Oxide
R755	VRS-VV3LB220J	Resistor, 22 3W Metal Oxide
R757	VRN-VV3AB4R7J	Resistor, 4.7 1W Metal Film
R762	VRS-CY1JF102J*	Resistor, 1k 1/16W Metal Oxide
R763	VRS-CY1JF102J*	Resistor, 1k 1/16W Metal Oxide
R764	VRS-CY1JF561J*	Resistor, 560 1/16W Metal Oxide
R772	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R774	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R802	VRS-CY1JF473J	Resistor, 47k 1/16W Metal Oxide
R805	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R806	VRS-CY1JF822J*	Resistor, 8.2k 1/16W Metal Oxide
R807	VRS-CY1JF124J*	Resistor, 120k 1/16W Metal Oxide
R808	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R809	VRD-RA2BE123J*	Resistor, 120k 1/8W Carbon
R810	VRS-CY1JF103J*	Resistor, 1k 1/16W Metal Oxide
R811	VRS-CY1JF103J*	Resistor, 1k 1/16W Metal Oxide
R812	VRS-CY1JF822J*	Resistor, 8.2k 1/16W Metal Oxide
R814	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R818	VRS-CY1JF220J*	Resistor, 22 1/16W Metal Oxide
R819	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R823	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon

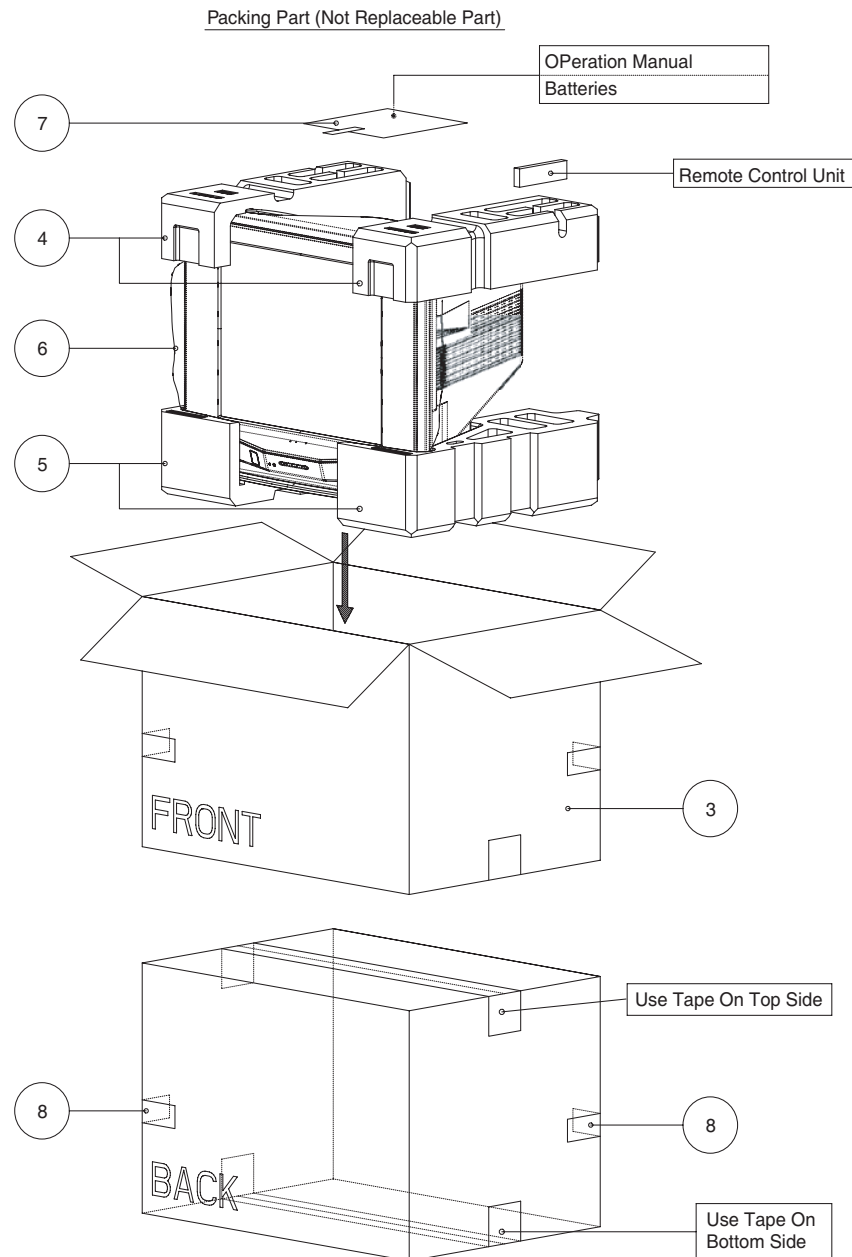
NO.	PARTS CODE	DESCRIPTION
[3] MAIN UNIT		
R825	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R827	VRD-RM2HD151J*	Resistor, 150 1/2W Carbon
R828	VRD-RA2BE223J*	Resistor, 22k 1/8W Carbon
R829	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R832	VRS-CY1JF222J*	Resistor, 2.2k 1/16W Metal Oxide
R833	VRS-CY1JF222J*	Resistor, 2.2k 1/16W Metal Oxide
R834	VRS-CY1JF222J*	Resistor, 2.2k 1/16W Metal Oxide
R835	VRS-CY1JF181J*	Resistor, 180 1/16W Metal Oxide
R836	VRS-CY1JF181J*	Resistor, 180 1/16W Metal Oxide
R837	VRS-CY1JF181J*	Resistor, 180 1/16W Metal Oxide
R838	VRS-CY1JF472J*	Resistor, 4.7k 1/16W Metal Oxide
R840	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R841	VRS-CY1JF333J*	Resistor, 3.3k 1/16W Metal Oxide
R1003	VRS-CY1JF102J	Resistor, 1k 1/16W Metal Oxide
R1004	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R1008	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R1010	VRS-CY1JF104J*	Resistor, 100k 1/16W Metal Oxide
R1011	VRS-CY1JF183J*	Resistor, 18k 1/16W Metal Oxide
R1012	VRS-CY1JF183J*	Resistor, 18k 1/16W Metal Oxide
R1013	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R1014	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R1015	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R1016	VRD-RA2BE332J*	Resistor, 3.3k 1/8W Carbon
R1017	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R1019	VRD-RA2BE101J*	Resistor, 100 1/8W Carbon
R1020	VRS-CY1JF183J*	Resistor, 18k 1/16W Metal Oxide
R1021	VRS-CY1JF822J*	Resistor, 8.2k 1/16W Metal Oxide
R1022	VRS-CY1JF183J*	Resistor, 18k 1/16W Metal Oxide
R1024	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R1025	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R1026	VRS-CY1JF183J*	Resistor, 18k 1/16W Metal Oxide
R1027	VRS-CY1JF104J*	Resistor, 100k 1/16W Metal Oxide
R1028	VRD-RA2BE391J*	Resistor, 390 1/8W Carbon
R1030	VRD-RA2BE103J*	Resistor, 10k 1/8W Carbon
R1031	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R1032	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R1040	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R1041	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R1042	VRS-CY1JF101J*	Resistor, 100 1/16W Metal Oxide
R1043	VCKYCY1HB103K*	Capacitor, 0.01μF 50V Ceramic
R1044	VRS-CY1JF104J*	Resistor, 100k 1/16W Metal Oxide
R1046	VRD-RA2BE102J*	Resistor, 1k 1/8W Carbon
R1056	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R1074	VRS-CY1JF103J*	Resistor, 10k 1/16W Metal Oxide
R1078	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R1079	VRS-CY1JF332J*	Resistor, 3.3k 1/16W Metal Oxide
R1087	VRS-CY1JF102J*	Resistor, 1k 1/16W Metal Oxide
R1092	VRS-CY1JF000J*	Resistor, 0 1/16W Metal Oxide
R1801	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R1802	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R1803	VRS-CY1JF473J*	Resistor, 47k 1/16W Metal Oxide
R1804	VRD-RA2BE222J*	Resistor, 2.2k 1/8W Carbon
R1805	VRS-CY1JF124J*	Resistor, 120k 1/16W Metal Oxide
S701	QSW-P0612CEZZ	Switch, POWER
S1001	QSW-KA019WJZZ+	Switch, CH UP
S1002	QSW-KA019WJZZ+	Switch, CH DOWN
S1003	QSW-KA019WJZZ+	Switch, VOL UP
S1004	QSW-KA019WJZZ+	Switch, VOL DOWN
S1005	QSW-KA019WJZZ+	Switch, MENU/PRESET
F701	QFS-C3225CEZZ	Fuse, 3.15A 250V
FH701	QFSHD1013CEZZ+	Fuse Holder
FH702	QFSHD1014CEZZ+	Fuse Holder
J1	VW7UGB4-040KK	Jumper Wire (Yellow / 40mm)
J2	VW7UGB9-040KK	Jumper Wire (White / 40mm)
J402	QJAKE0211CE04	Jack (for 21F-PT220 only)
J403	QJAKE0211CE09	Jack (for 21F-PT220 only)
J405	QJAKH0044AJZZ	Jack (Rear AV)
P301	QPLGN0241CEZZ	Plug, 2 Pin (S) (for 21F-PA18 / 21F-PA18(B) only)
P302	QPLGN0461CEZZ	Plug, 4 Pin (S) (for 21F-PT220 / 21F-PD250 only)
P601	QPLGN0660CEZZ	Plug, 6 Pin (F)
P602	LHLDW1104PEZZ	Holders, H-Wire
P701	QPLGN0260CEZZ	Plug, 2 Pin
P702	QPLGN0269GEZZ	Plug, 2 Pin (H)
P1001	LHLDW1105PEZZ	Holders, K-Wire
P1002	QPLGN0561CEZZ	Plug, 5 Pin (BC)
RMC1001	RRMCUA022WJZZ	Remote Control Receiver
RDA301	PRDARA420WJFW	Heat Sink for IC301
RDA501	PRDARA120WJFW	Heat Sink for IC501
RDA602	PRDARA361WJFW	Heat Sink for Q602
RDA701	PRDARA119WJFW	Heat Sink for IC701
TP801	QLUGP0111GEFW	Lug Terminals

NO.	PARTS CODE	DESCRIPTION
[4] CRT UNIT		
Q853	VSBF422++++-2+	Transistor, BF422
Q854	VSBF422++++-2+	Transistor, BF422
Q855	VSBF422++++-2+	Transistor, BF422
Q894	VS2SA1530AR-1*	Transistor, 2SA1530AR
D859	VHD1N4148//-1*	Diode, 1N4148
D895	VHD1N4148//-1*	Diode, 1N4148
D896	VHEZJ5R6C++1E*	Zener Diode, 5.6V
D898	VHD1N4148//-1*	Diode, 1N4148
L851	VP-MK820K0000+	Peaking Coil, 82mH
C851	VCKYPA1HB561K+	Capacitor, 560pF 50V Ceramic
C852	VCKYPA1HB271K+	Capacitor, 270pF 50V Ceramic
C853	VCKYPA1HB271K+	Capacitor, 270pF 50V Ceramic
C880	RC-KZ0016CEZZ	Capacitor, 0.01μF 1.5kV Ceramic
C893	VCEA0A1CW336M+	Capacitor, 33μF 16V Electrolytic
R849	VRS-CY1JF331J*	Resistor, 330 1/16W Metal Oxide
R850	VRS-CY1JF470J*	Resistor, 47 1/16W Metal Oxide
R851	VRS-CY1JF470J*	Resistor, 47 1/16W Metal Oxide
R852	VRS-CY1JF470J*	Resistor, 47 1/16W Metal Oxide
R854	VRS-CY1JF331J*	Resistor, 330 1/16W Metal Oxide
R855	VRS-CY1JF331J*	Resistor, 330 1/16W Metal Oxide
R859	VRS-VV3DB153J	Resistor, 15k 2W Metal Oxide
R861	VRS-VV3DB153J	Resistor, 15k 2W Metal Oxide
R863	VRS-VV3DB153J	Resistor, 15k 2W Metal Oxide
R864	VRD-RA2BE470J*	Resistor, 47 1/8W Carbon
R876	VRS-CY1JF121J*	Resistor, 120 1/16W Metal Oxide
R877	VRS-CY1JF121J*	Resistor, 120 1/16W Metal Oxide
R878	VRS-CY1JF121J*	Resistor, 120 1/16W Metal Oxide
R880	VRD-RM2HD332J*	Resistor, 3.3k 1/2W Carbon
R881	VRD-RM2HD332J*	Resistor, 3.3k 1/2W Carbon
R882	VRD-RM2HD332J*	Resistor, 3.3k 1/2 Carbon
R891	VRS-CY1JF152J*	Resistor, 1.5k 1/16W Metal Oxide
R892	VRS-CY1JF391J	Resistor, 390 1/16W Metal Oxide
R894	VRS-CY1JF152J*	Resistor, 1.5k 1/16W Metal Oxide
R895	VRD-RA2BE561J*	Resistor, 560 1/8W Carbon
P860	LHLDW1104PEZZ	Holders, H-Wire
P880	LHLDW1105PEZZ	Holders, K-Wire
SC851	QSOCVA023WJZZ	CRT Socket, 12 Pin
[5] MISCELLANEOUS PARTS		
	QACCZA085WJPZ	AC Cord
	VSP0509PA01WA	Speaker
	QCNW-A788WJPZ	K-Wire
	QCNW-A230WJZZ	H-Wire
	QCNW-2206PEZZ	Speaker Wire (for 21F-PA18 / 21F-PA18(B) only)
	QCNW-E681WJPZ	Speaker Wire (for 21F-PT220 / 21F-PD250 only)
[6] SUPPLIED ACCESSORIES		
	RRMCGA372WJSA	Remote Control Unit
	UBATU0247AJZZ	Battery
	TINS-D166WJN1	Operation Manual

[7] CABINET PARTS

NO.	PARTS CODE	DESCRIPTION
CABINET PARTS (21F-PT220)		
1	CCABAB883WEA0	Front Cabinet Assembly
1-1	<i>Not Available</i>	Front Cabinet
1-2	JBTN-A673WJSA	Power Button
1-3	MSPRCA067WJFW	Spring
1-4	GCOVAC321WJSA	R/C & LED Cover
1-5	JBTN-A674WJSA	Control Button
1-6	HBDGB0001KJSC	Sharp Badge
2	CCABBB176WEA0	Rear Cabinet Assembly
2-1	<i>Not Available</i>	Rear Cabinet
CABINET PARTS (21F-PA18 / 21F-PA18(B))		
1	CCABAB876WEA0	Front Cabinet Assembly (for 21F-PA18 only)
	CCABAB877WEA0	Front Cabinet Assembly (for 21F-PA18(B) only)
1-1	<i>Not Available</i>	Front Cabinet
1-2	JBTN-A455WJSA	Power Button
1-3	MSPRC0005PEFW	Power Button Spring
1-4	COVAB226WJSA	R/C & LED Cover
1-5	HBDGB0001KJSC	Sharp Badge
1-6	GDORFA152WJSA	Door
1-7	MSPRPA025WJFW	Door Spring
1-8	HINDPB780WJZZ	Indication Plate
2	CCABBA215WEA0	Rear Cabinet
2-1	<i>Not Available</i>	Cab B Indication Plate
CABINET PARTS (21F-PD250)		
1	CCABAB849WEA0	Front Cabinet Assembly
1-1	<i>Not Available</i>	Front Cabinet
1-2	JBTN-A571WJSC	Power Button
1-3	MSPRCA067WJFW	Spring
1-4	GCOVAB628WJSA	R/C & LED Cover
1-5	JBTN-A572WJSB	Control Button
1-6	HBDGB0001KJSC	Sharp Badge
2	CCABBB148WEA0	Rear Cabinet Assembly
2-1	<i>Not Available</i>	Rear Cabinet
2-2	LHLDWA101WJZZ	AC Cord Hook

[8] PACKING PARTS



NO.	PARTS CODE	DESCRIPTION
[8] PACKING PART		
3	SPAKCD639WJZZ	Packing Case (for 21F-PD250 only)
	SPAKCC730WJZZ	Packing Case (for 21F-PA18 / 21F-PA18(B) only)
	SPAKCD498WJZZ	Packing Case (for 21HXF250I / 21HXF1000I only)
4	SPAKXB061WJZZ	Packing Foam (Top) (for 21F-PD250 only)
	SPAKXA765WJZZ	Packing Foam (Top) (for 21F-PA18 / 21F-PA18(B) only)
	SPAKXB522WJZZ	Packing Foam (Top) (for 21HXF250I / 21HXF1000I only)
5	SPAKXB062WJZZ	Packing Foam (Bottom) (for 21F-PD250 only)
	SPAKXA766WJZZ	Packing Foam (Bottom) (for 21F-PA18 / 21F-PA18(B) only)
	SPAKXB523WJZZ	Packing Foam (Bottom) (for 21HXF250I / 21HXF1000I only)
6	SSAKAA058WJZZ	Wrapping Sack for Set
7	SSAK0230CEZZ	Poly Bag for Accessory
8	TLABZB549WJZZ	Packing Label (for 21F-PD250 only)
	TLABZB584WJZZ	Packing Label (for 21F-PA18 only)
	TLABZB585WJZZ	Packing Label (for 21F-PA18(B) only)
	TLABZB582WJZZ	Packing Label (for 21F-PT220 only)

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